Exhibit 7

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE BANK OF AMERICA CORP. SECURITIES, DERIVATIVE, AND EMPLOYEE RETIREMENT INCOME SECURITY ACT (ERISA) LITIGATION	Master File No. 09 MDL 2058 (PKC)
THIS DOCUMENT RELATES TO: The Consolidated Securities Action	

EXPERT REPORT OF ALLEN FERRELL, PH.D.

September 16, 2011

I. QUALIFICATIONS

I am the Greenfield Professor of Securities Law at Harvard Law School where I have taught since 1998. I received a Ph.D. in economics from the Massachusetts Institute of Technology with fields in econometrics and finance and a J.D. from Harvard Law School. My Ph.D. concerned the relationship between stock prices and financial disclosures.

I am also a faculty associate at the Kennedy School of Government at Harvard, a member of the American Law Institute Project on the Application of U.S. Financial Regulations to Foreign Firms and Cross-Border Transactions, a research associate at the European Corporate Governance Institute, and a member of the ABA Task Force on Corporate Governance.

I formerly was a member of the Board of Economic Advisors to the Financial Industry Regulatory Authority ("FINRA"), an executive member of the American Law School section on securities regulation, and the Chairperson of Harvard's Advisory Committee on Shareholder Responsibility (which is responsible for advising the Harvard Corporation on how to vote shares held by its endowment).

I have testified before the U.S. Senate Subcommittee on Securities, Insurance and Investment and presented to, among others, the Securities and Exchange Commission, the World Bank, the Structured Products Association and the National Bureau of Economic Research. I have published approximately thirty articles in leading journals including on event study methodology, materiality and the economics of securities damages. I have also been an expert witness in a variety of securities matters including issues involving event studies, materiality and securities damages. My testimony in the last four years and academic work are summarized on my curriculum vitae, which is attached hereto as Appendix A. I am being compensated at my customary hourly rate of $850 per hour for my work on this matter.

II. INTRODUCTION AND SUMMARY OF CONCLUSIONS

The Consolidated Second Amended Class Action Complaint ("Complaint") alleges two primary disclosure deficiencies by Bank of America and various of its officers and directors. These alleged disclosure deficiencies concern the failure to adequately disclose, first, the merger agreement terms regarding the payment of 2008 bonuses to Merrill Lynch employees and, second, Merrill Lynch's 4Q 2008 after-tax losses of approximately $15.3 billion. The alleged failure to adequately disclose bonus payments first began, according to the Complaint, on September 18, 2008 with the filing of the Bank of America and Merrill Lynch merger agreement (Complaint, ¶218). The alleged failure to adequately disclose Merrill Lynch's 4Q 2008 losses first began, according to the Complaint, as of November 5, 2008 when some Bank of America officers allegedly became aware, at least in part, of Merrill Lynch's 4Q 2008 losses (Complaint, ¶101). There are no allegations in the Complaint that Bank of America officers or directors knew of Merrill Lynch's interim losses in the 4Q 2008 (a quarter that began as of September 27, 2008) at an earlier point in time. The earliest communication in the Complaint referencing the $7.5 billion in Merrill Lynch losses for October, 2008 occurs on November 12, 2008. (Complaint, ¶102).

The Complaint identifies five dates (Complaint, ¶¶ 273-280) on which one or the other of these alleged disclosure deficiencies were purportedly revealed to the market: (1) January 12, 2009; (2) January 13, 2009; (3) January 15, 2009; (4) January 16, 2009; and (5) January 22, 2009 ("corrective disclosure dates"). The Complaint further alleges that there are Bank of America stock price drops associated with each of these corrective disclosure days.

These alleged disclosure deficiencies concerning the Merrill Lynch bonuses and Merrill Lynch's 4Q 2008 losses form the basis for plaintiffs' Rule 10b-5 class action claims (with the putative class period running from September 18, 2008 to January 21, 2009 inclusive), plaintiffs' Section 14(a) claim consisting of holders of Bank of America shares as of October 10, 2008 entitled to vote on the Bank of America-Merrill Lynch merger, and plaintiffs' Section 11 claim consisting of purchasers of Bank of America stock sold pursuant to a October 7, 2008 registered public offering. The Section 14(a)

claim not only relies upon the same disclosure deficiencies concerning Merrill Lynch's bonus payments and Merrill Lynch's 4Q 2008 losses purportedly reflected in the proxy statement and updates thereto as the Rule 10b-5 class action claims (Complaint, ¶336) but also identifies the same five corrective disclosure dates (listed above) as the Rule 10b-5 class action claims (Complaint, ¶338).

I have been asked by counsel for Bank of America to assess the statistical significance, if any, of the price impact (or materiality) of the information disclosed in the purported corrective disclosures identified by the Complaint. I was also asked to analyze the statistical significance, if any, of Bank of America stock price movements on dates when there were disclosures identified by the Complaint concerning bonus payments by Merrill Lynch, as well as publicly reported statements on that subject. I have been also asked to address the economics of Rule 10b-5 and Section 14(a) actions and whether this economic analysis casts light on the appropriateness of the Complaint's Section 14(a) holders class. I have received the assistance of the staff employed by Compass Lexecon. Appendix B lists the materials I have relied on in the course of my analysis.

Based on my analysis, I have reached the following principal conclusions:

- Merrill Lynch's intent (and ability) to make substantial bonus payments in 2008 was already part of the total mix of information by the time of the purported corrective disclosures. Similarly, substantial losses in 4Q 2008 at Merrill Lynch were also part of the total mix of information by that time. Consistent with these conclusions, there were no statistically significant Bank of America stock price reactions on three of the five purported corrective disclosure dates (January 12, 2009; January 13, 2009; and January 16, 2009). As to the other two alleged corrective disclosure dates (January 15, 2009 and January 22, 2009) – and as to January 16, 2009 as well – confounding negative information was also disseminated.

- There was likewise no statistically significant price impact on Bank of America stock when: (i) the merger agreement containing the alleged misrepresentations concerning Merrill Lynch bonus payments was publicly filed on September 18, 2008; (ii) the three preliminary proxy statements and definitive proxy also containing alleged

misrepresentations concerning Merrill Lynch bonus payments were publicly filed; (iii) Merrill Lynch's 10-Q for the third quarter 2008, which reported compensation and benefit accruals, was publicly filed; (iv) various print and other media reported during 4Q 2008 that Merrill Lynch would pay in excess of $6 billion in 2008 bonuses; and (v) the press first reported the so-called "cap" on bonus payments contained in the disclosure schedule attached to the merger agreement. These price non-reactions indicate that the disclosed information concerning Merrill Lynch's bonus payments, all of which relate to the Complaint's allegations of inadequate disclosure of material information in the merger agreement and proxy statements, was in fact not material.

● There was also no statistically significant price impact on Bank of America stock on December 8, 2008, the first trading day after the shareholder vote and the day after a Morgan Stanley analyst issued a report which estimated $11 billion in losses at Merrill Lynch and noted that these "mark to market hits in [Merrill Lynch's] assets . . . have already been reflected in [Bank of America's] share price."[1]

● Despite identifying the cognizable harm as Rule 10b-5 based, the Section 14(a) class consists of holders, which is fundamentally inconsistent with a Rule 10b-5 theory of harm. Such a class would necessarily include shareholders who could not possibly have been harmed as a result of purchasing shares at prices inflated by the alleged disclosure deficiencies, i.e. purchasers prior to September 18, 2008.

● As an economic matter, the Section 14(a) class alleged in the Complaint suffered no direct out-of-pocket damages as voters. The merger at issue in this action was structured as an acquisition of Merrill Lynch by Bank of America. The Bank of America shareholders were asked to approve the issuance of shares necessary to effectuate the merger. However, as the shareholders of the acquiring company, the Bank of America shareholders did not themselves engage in any transaction in connection with the merger. To the extent that the Bank of America shareholders were misled into thinking that the merger made economic sense to Bank of America, e.g., that the value of

---

[1] Morgan Stanley, "Banking – Large Cap Banks Marking to Market 4Q08, p. 5, Dec. 7, 2008

Merrill Lynch was equal to or greater than the value of the Bank of America stock to be issued in the merger, any economic harm resulting from some economic form of overpayment by Bank of America was suffered directly by Bank of America, and indirectly by its shareholders.

● The Complaint alleges that the members of the putative Section 14(a) class were harmed by the removal of inflation associated with the alleged corrective disclosures in January 2009 – several weeks after the shareholder vote in question. But there is no economic nexus between harm to Section 14(a) class members and the removal of inflation associated with the alleged corrective disclosures since members of the Section 14(a) class are not alleged to have purchased their shares at artificially inflated prices. It is noteworthy that Plaintiffs seek to recover for the identical stock drops on behalf of the members of the putative Section 10(b) class who, by contrast, are alleged to have purchased their shares at artificially inflated prices. As an economic matter, these two groups are differently situated, but the Complaint rests on the economically untenable assumption that they are similarly situated.

● The putative Section 14(a) holders class fails to remove from the definition of the class Bank of America shareholdings offset by Merrill Lynch shareholdings despite the fact that investors who held equal shares in both companies were economically unaffected by the merger.

I explain the bases for these conclusions below.

III. ASSESSING MATERIALITY

I will proceed in four steps in the course of assessing the materiality of the information concerning the Merrill Lynch bonus payments and the Merrill Lynch 4Q 2008 losses that were allegedly inadequately disclosed up until the five corrective disclosure dates in January 2009 alleged in the Complaint. First, before beginning my analysis of materiality I will specifically identify in Section A, in light of the Complaint's

allegations, the time periods for which the materiality of the allegedly misrepresented or omitted information is relevant. Since materiality is typically assessed by reference to both qualitative and quantitative considerations, I will then in Section B analyze the allegedly misrepresented or omitted information qualitatively in order to determine whether one would in fact expect to observe negative stock price reactions to the disclosures that occurred on the five corrective disclosure dates. This entails examining whether the disclosures altered the total mix of information as it existed at the time of the purported corrective disclosures. Then, in Section C, I will assess materiality from a quantitative perspective by analyzing whether any of the alleged misrepresentations and corrective disclosures are associated with statistically significant stock price reactions. I do so through the use of an event study. I will examine in Section C whether the various disclosures made concerning Merrill Lynch bonus payments prior to the corrective disclosure dates, including the alleged Merrill Lynch bonus payment misrepresentation made on September 18, 2008, were associated with statistically significant stock price reactions. Section C will also examine whether news announcements or analyst reports which commented on Merrill Lynch's bonus payments or 4Q 2008 losses prior to the corrective disclosures were associated with statistically significant price reactions.

A. Relevant Time Periods for the Materiality Assessment

According to the Complaint, the relevant time period for the materiality of the allegedly misrepresented information concerning Merrill Lynch's bonus payments for the Rule 10b-5 claim starts as of September 18, 2008 and runs till January 21, 2009 (inclusive). September 18, 2008 is the date of the first alleged misrepresentation concerning the Merrill Lynch bonus payments; on that day Bank of America filed a Form 8-K with the SEC that attached the merger agreement as an exhibit.

It is worth emphasizing, however, that the relevant time period for assessing the materiality of plaintiffs' 10b-5 bonus claim is substantially shortened to the extent that the Complaint is read to allege that what made the allegedly misrepresented bonus provisions material to Bank of America shareholders is that they allowed Merrill Lynch to pay billions of dollars in bonuses even though it was incurring billions of dollars of

losses in 4Q 2008. This is worth highlighting as various sections of the Complaint formulate the claimed disclosure deficiency in this manner.[2] So formulated, the allegedly misrepresented bonus provisions cannot logically be deemed material until November 5, 2008 — the earliest date that the Complaint alleges that Bank of America officials became aware (or were reckless in not knowing) of Merrill Lynch's financial results in October 2008 (Complaint, ¶101).[3] This implies that, at a minimum, the September 18, 2008 – November 4, 2008 period (inclusive) should not be deemed to be part of the Rule 10b-5 class.

As for the 14(a) claim, there is no allegation in the Complaint that as of October 10, 2008, the record date for the shareholder vote on the merger, Bank of America had any knowledge of Merrill Lynch's October 2008 results. As noted above, to the extent that the Complaint is read to allege that the materiality of the proxy statement's alleged misrepresentations regarding Merrill Lynch's intent or ability to make bonus payments turns upon Merrill Lynch's intent to make such payments despite incurring substantial 4Q 2008 losses, there is likewise no allegation in the Complaint that as of October 10, 2008 Bank of America had any knowledge of Merrill Lynch's October 2008 results.

As for the Section 11 putative class, the Section 11 claim (presented in Count VII) centers on a registered offering that occurred on October 7, 2008 (Complaint, ¶24), a mere seven business days into the 4Q of 2008. There is no allegation in the Complaint that at this early point in the 4Q of 2008 there was already a certain quantum of 4Q 2008 losses at Merrill Lynch that rendered the registration statement materially misleading. For the purposes of the Section 11 claim, the disclosure deficiency therefore must concern disclosures concerning the Merrill Lynch bonus payments and not Merrill Lynch's 4Q 2008 interim losses (Complaint, ¶368). Accordingly, for the purposes of the Section 11 claim, accepting the Complaint's allegations as true, the materiality of the allegedly inadequate disclosure concerning Merrill Lynch bonus payments is the relevant issue and not the claim that the Merrill Lynch 4Q 2008 interim losses (or the payment of such

[2] See Complaint ¶ 191 (analyst "described the bonuses as 'ridiculous,' especially in light of Merrill's losses"); ¶ 193 ("Associated Press reported that the revelation of the accelerated bonus payments amidst Merrill's losses triggered Thain's purported 'resignation'"); ¶ 194 ("financial press uniformly reported that the size and accelerated schedule of Merrill's bonus payments – as well as the fact that they were paid amidst historically large losses – was stunning news to the investor community").

[3] Indeed, the Complaint alleges that Bank of America did not become aware of Merrill Lynch's "actual loss" for October 2008 and its initial forecast for 4Q 2008 until November 12, 2008. (Complaint ¶ 102).

bonuses in light of those interim losses) were inadequately disclosed. I will undertake such a materiality assessment in the following sections.

B. QUALITATIVE ANALYSIS

I will now examine whether the purported corrective disclosures on the five dates identified by the Complaint were material in light of the total mix of information that existed as of that point in time. I first analyze the alleged corrective disclosure pertaining to Merrill Lynch's 4Q 2008 interim losses, and then analyze the alleged corrective disclosures pertaining to its payment of bonuses. Based on this analysis, I conclude that there is no qualitative evidentiary basis to conclude that these disclosures were material.

1. The Purported Corrective Disclosures Pertaining to Merrill Lynch's Interim Losses.

January 12, 2009 Corrective Disclosure: The Complaint alleges that "[n]ews that Merrill and BoA would report much higher losses than expected began to leak into the market by no later than Sunday, January 11, 2009, when a Citigroup analyst forecast fourth quarter losses at Merrill to be $6 billion, including $7 billion in writedowns on Merrill's 'high risk assets'" (Complaint, ¶176). The Complaint further alleges that, in response to this analyst report, Bank of America's stock price fell 12% on January 12, the next trading day. (Complaint ¶ 273).

The fact that Merrill Lynch faced substantial losses in 4Q 2008 was not news in light of previously publicly available information, including an analyst estimate of *greater* Merrill Lynch 4Q 2008 losses issued several weeks before. On December 7, 2008, a Morgan Stanley analyst estimated Merrill Lynch writedowns of *$11 billion*, including $8.9 billion of investment bank exposures and an incremental $2.1 billion writedown on other loan exposures. Furthermore, the Morgan Stanley analyst noted that

these "mark to market hits in [Merrill Lynch's] assets . . . have *already been reflected in [Bank of America's] share price*."[4]

While the $11 billion figure was less than the over $21 billion in losses that were ultimately reported after the 4Q ended on December 31, 2008, the Complaint does not allege that Bank of America knew at the time of the shareholder vote on December 5 that Merrill Lynch had incurred $21 billion in losses. To the contrary, according to the Complaint, Bank of America was aware on December 3, 2009 that Merrill Lynch had incurred actual losses of $7.5 billion in October and estimated that its November 2009 losses would reach $4.9 billion. (Complaint ¶¶ 102, 124-25). These losses (actual and estimated) for the two months totaled $12.4 billion, only about $1.4 billion higher than the amount of losses that, according to the Morgan Stanley analyst, had already been priced into the market for Bank of America's stock.

I note in this connection that plaintiffs' own expert, Mr. Coffman, in the course of discussing why in his opinion analyst reports are an important mechanism of market efficiency for Bank of America during this period explains, "These reports served the purpose of disseminating publicly available information along with commentary, news, updates, analysis and recommendations of the analysts to investors." (Coffman, ¶31).

In addition to these prior loss estimates by the Morgan Stanley analyst, the January 12, 2009 Citigroup analyst report did not constitute a corrective disclosure in light of Merrill Lynch's historical pattern of substantial asset writedowns in every quarter since the onset of the financial crisis in the summer of 2007, the other numerous statements made by Bank of America and Merrill Lynch during 4Q 2008 concerning the adverse effects of the financial crisis on Merrill Lynch's financial condition and the market's contemporaneous awareness regarding the impact of widening credit spreads and unprecedented volatility on financial institutions generally. I will address these issues in more detail when discussing the alleged corrective disclosure dates of January 15 and 16, 2009 below.

January 13, 2009 Corrective Disclosure: The Complaint also alleges that, according to a June 1, 2009 article in the *Sydney Morning Herald*, on January 14, 2009

---

[4] Morgan Stanley, "Banking – Large Cap Banks Marking to Market 4Q08, p. 5, Dec. 7, 2008 (emphasis added)

(which was January 13 in New York), Merrill executives in Australia "had informed Australian bond traders that Merrill was going to report 'awful' news that was going to cause the market to 'plummet' on January 15, 2009." (Complaint ¶177). According to the same article, one trader reported that he was told that "'[t]he market is expecting Merrill Lynch in New York to come out with a bad result on Thursday night.'" The Complaint alleges that Bank of America's stock price dropped approximately 11% on January 13. (*Id*. ¶274).

The Complaint's characterization of this article as a corrective disclosure is puzzling. Not only did the article in question appear on June 1, 2009 – some four-and-a-half months after the alleged fraud was revealed and the putative class period ended – but the Complaint simply misreads the article. The *Sydney Morning Herald*'s story concerned *not* Merrill Lynch's disclosure of its fourth quarter 2008 losses in January *2009*, but its disclosure of its fourth quarter *2007* losses on "January 18, 2008" — a full year earlier. This article is clearly not a "corrective disclosure" with respect to any of the alleged misstatements or omissions at issue here.

January 15, 2009 and January 16, 2009 Corrective Disclosures: The Complaint alleges that "[o]n the morning of January 15, 2009, *The Wall Street Journal* shocked investors with news that '[t]he U.S. government is close to finalizing a deal that would give billions in additional aid to Bank of America Corp. to help it close its acquisition of Merrill Lynch & Co.,' citing larger-than-expected but unquantified fourth quarter losses at Merrill." (Complaint, ¶178). The Complaint goes on to state that "[o]n the morning of January 16, 2009, the Treasury Department issued a press release disclosing the Government bailout of BoA" and, furthermore, on "January 16, 2009, BoA announced terrible fourth quarter results, revealing . . . .the $21.5 billion losses at Merrill and the fact that TARP funding had been necessary to complete the merger." (Complaint, ¶¶180, 275). The $21.5 billion pre-tax figure represented a 4Q 2008 after-tax loss of approximately $15.3 billion (Complaint, ¶181).

As mentioned in my January 12 and January 13, 2009 discussion there had already been analyst estimates of substantial 4Q 2008 Merrill Lynch losses well before the fourth quarter had even ended.

In addition, as has already been touched upon, Merrill Lynch had by this point a history of substantial quarterly writedowns and losses, making it not particularly surprising that Merrill Lynch continued to experience losses in the unprecedented market conditions following the bankruptcy filing of Lehman Brothers on September 15, 2008. Exhibit 1A presents details on Merrill Lynch's holdings of a broad range of assets (including its super seniors, mortgage holdings, monoline hedges, and leveraged loans among other assets) and the associated quarterly writedowns on these assets from Q3 2007 up to and including 4Q 2008 for a total of six quarters. This information was obtained from readily available public sources such as Merrill Lynch's 8-Ks and 10-Qs as well as Bloomberg data. As is apparent from Exhibit 1A, as of the end of Q3 2008, Merrill Lynch had taken over $55 billion in writedowns and still had over $75 billion in remaining exposure. The average quarterly Merrill Lynch writedown for the five quarters prior to 4Q 2008 (3Q 2007; 4Q 2007; 1Q 2008; 2Q 2008; 3Q, 2008) on these assets was approximately $11.2 billion with the 4Q 2008 writedown on these assets being $10.5 billion. Or consider the 3Q 2008 Merrill Lynch writedown, publicly disclosed on October 16, 2008, which reported a $12 billion writedown representing approximately 15.7% of the reported value of these assets. The 4Q 2008 writedowns on these same assets in comparison represented approximately 13.8% of the reported value of Merrill Lynch's asset base at that time of $75.8 billion.

Merrill's quarterly reports from the third quarter of 2007 through the third quarter 2008 (which are incorporated by reference into the proxy), disclosed that since mid-2007, when the credit crisis began, Merrill had suffered five consecutive quarters of multibillion-dollar losses from continuing operations – a total of $38.2 billion pre-tax. The details of these quarterly losses are contained in Exhibit 1B. As indicated in this exhibit, were it not for several one-time gains, Merrill would have actually reported $49.4 billion in pre-tax losses for the five quarters preceding the fourth quarter of 2008.

Moreover, the proxy and the information incorporated therein warned shareholders that credit markets and market conditions generally were not likely to improve in the near term. The proxy reminded shareholders of the extraordinary market

conditions under which the Merger Agreement had been negotiated,[5] and that "market conditions have been extremely volatile."[6] And the proxy enumerated several risk factors relating to the "Business Condition and Prospects of Merrill," including, among others, "the risk of Merrill Lynch's credit ratings being further downgraded," and "challenging and uncertain investment banking industry conditions and risks . . . expected to persist, including. . . the volatile valuations and illiquidity of certain financial assets and exposures. . .[and]. . .generally uncertain national and international economic conditions."[7]

Merrill Lynch's third quarter Form 10-Q, which was incorporated by reference into the proxy and filed approximately one month before the shareholder vote, was even more stark, describing the macro-economic environment as "one of instability, economic slow-down, and potential deflation," resulting in "extreme volatility and continued de-leveraging in the market."[8] It went on to note that, "[t]urbulent market conditions in the short and medium-term will continue to have an adverse impact on our core businesses."[9] And Bank of America's own third quarter Form 10-Q, filed the following day, discussed Merrill Lynch's positions in securities, derivatives, loans and loan commitments and noted that "future results may continue to be materially impacted by the valuation adjustments applied to these positions."[10] Further similar disclosures by both Merrill Lynch and Bank of America in their 3Q 2008 filings are presented in Exhibit 1C.

Both Bank of America and Merrill Lynch also made other statements regarding difficult and deteriorating market conditions during 4Q 2008. On October 6, 2008 during an investor conference call, Ken Lewis, Bank of America's CEO, stated that the Bank's economic outlook now called for a "weaker economy going into 2009," as the recession was going to be "deeper than we originally thought." At a November 11, 2008 financial services conference, John Thain, Merrill Lynch's CEO, stated that the company was "not

---

[5] The proxy listed, among other conditions, "extremely distressed conditions in the financial services industry generally and the investment banking industry in particular," and an "unprecedented market environment that had triggered significant dislocations, the near-bankruptcy of The Bear Stearns Companies Inc. and the apparently imminent bankruptcy of Lehman Brothers." Proxy at 49.
[6] Proxy at 38.
[7] Id. at 52.
[8] MER Q3 2008 form 10-Q, at 83.
[9] Id.
[10] BofA Q3 2008 Form 10-Q, at 177.

going to get better quickly" and that the "U.S. economy is contracting very rapidly, asset prices are falling, and that is creating a great degree of uncertainty, both in the equity markets and in the debt markets, about the near-term outlook, at least over the next few quarters." Additional statements from 4Q 2008 regarding the difficulties facing financial institutions can be found in Exhibit 1D.

In light of these disclosures, the allegedly omitted information regarding Merrill Lynch's 4Q interim losses was not qualitatively material. Bank of America investors were presented with substantial information during the relevant period that Merrill Lynch's business had been, and continued to be, under severe stress. Assuming Bank of America's common stock was efficient throughout the class period as asserted by Plaintiffs' expert, Mr. Coffman, all of the information discussed above was already incorporated into Bank of America's stock price prior to the alleged corrective disclosures.

2. The Purported Corrective Disclosure Pertaining to Merrill Lynch's Bonus Payments

January 22, 2009 Corrective Disclosure: The Complaint states that "On the night of January 21, 2009, the *Financial Times* reported that, in late December, immediately prior to the closing date, Merrill had paid $3-4 billion in bonuses despite its massive fourth quarter losses." (Complaint, ¶20; see also ¶278). The *Financial Times* article on January 21, 2009 stated, "Despite the magnitude of the losses, Merrill had set aside $15bn for 2008 compensation, a sum that was only 6 per cent (sic) lower than the total in 2007, when the investment bank's losses were smaller. The bulk of $15bn in compensation was paid out as salary and benefits throughout the course of the year . . . [and] about $3bn to $4bn was paid out in bonuses in December."

But the total mix of information already reflected information concerning the Merrill Lynch bonus payments prior to this particular news story. There had been in fact numerous prior announcements and discussions, including several by Merrill Lynch itself, concerning the fact that Merrill Lynch would pay billions of dollars of bonuses in 2008 and that these bonuses would be paid prior to the end of the calendar year. In its

October 16, 2008 earnings release, Merrill Lynch announced accrued compensation and benefits expenses of $3.5 billion for the third quarter, bringing the accrual for the first nine months of the year to $11.2 billion (down 3% from the prior year period). Thereafter *The New York Times* reported on October 27, 2008 that "[f]ive straight quarters of losses and a 70 percent slide in its stock this year have not stopped Merrill Lynch from allocating about $6.7 billion to pay bonuses." Indeed, *The Times* quoted a Merrill Lynch spokeswoman as stating that the firm's accrued bonuses "were not down as much as those at Goldman and Morgan Stanley because Merrill cut expenses last year, when it also had a loss." On December 4, 2008, the day before the shareholder vote, the *Daily Telegraph* reported that "Merrill is due to inform staff of bonuses on December 22, with payment due at the end of the month."[11] And, on January 16, 2009, Bank of America disclosed that Merrill Lynch's total compensation and benefits accrual for fiscal 2008 was $15 billion. As detailed in Exhibit 2, during the putative class period, there were public statements discussing Merrill Lynch's intention to make multi-billion dollar bonus payments in 2008 on at least 10 different days through January, 2009.

In light of these disclosures, the purported corrective disclosure of January 22, 2009 was not qualitatively material. The total mix of information available to Bank of America shareholders prior to that date made clear Merrill Lynch's intent to pay billions of dollars in bonuses and to do so before year-end 2008. Assuming Bank of America's common stock was efficient throughout the class period as asserted by Plaintiffs' expert, Mr. Coffman, all of the information discussed above was already incorporated into Bank of America's stock price prior to the alleged corrective disclosures.

I will now test through the use of an event study my qualitative conclusion that there is no evidentiary basis to conclude that the purported corrective disclosures revealed material information on those dates.

[11] Quinn, J. and Sibun, J., The Telegraph, "Investment Banks Set to Cut 30,000 Jobs," December 4, 2008.

C. QUANTITATIVE ANALYSIS

1. The Event Study Method

An event study is a regression analysis that measures the effect of an event, such as a firm's earnings announcement, on a firm's stock price.[12] As I have previously written, "[e]vent study analysis is a ubiquitous tool in assessing claims of loss causation as well as the 'materiality' of misstatements or fraudulently omitted information."[13] In such an analysis, one must, of course, control for factors other than the event that may also simultaneously affect the stock price (the "control variables"). Because stock prices can reflect market and industry-specific information, it is necessary to extract the market and industry-specific information.[14] More specifically, in controlling for industry effects through the use of an industry control, as I have explained elsewhere, "it is important to pay particular attention to which firms are truly 'comparable' in terms of their line of business and, hence, should be included in the industry index."[15]

Once market and industry control variables have been selected, an estimation window is then used by the researcher to quantify the extent to which the firm's stock price has historically moved with the general market and comparable firms within its industry (the "market model"). Two considerations can be important in selecting the estimation window. First, the estimation window should exclude days on which alleged misrepresentations and corrective disclosures thereof occurred as stock price reactions on these days could potentially reflect this information (assuming the Complaint's allegations are true) rather than the stock's historical relationship with the general market or comparable firms within its industry. Second, market conditions during the estimation

---

[12] MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35, (1997): 13-39.

[13] Ferrell, Allen, and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of *Dura Pharmaceuticals v. Broudo,* 63 Bus. Lawyer 163, (2007).

[14] Cavaglia, Stefano, Christopher Brightman, and Michael Aked, "The Increasing Importance of Industry Factors" *Financial Analysis Journal* (2000): 41-54 ("Our results suggest that industry factors have become an increasingly important component of security returns"); Campbell, John, Martin Lettau, Burton Malkiel, and Yexiao Xu, "Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk," *Journal of Finance: 56, No. 1* (2001): 1-44 ("Aggregate market return is only one component of the return to an individual stock. Industry-level and idiosyncratic firm-level shocks are also important components of individual stock returns").

[15] Ferrell, Allen, and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of *Dura Pharmaceuticals v. Broudo,* 63 Bus. Lawyer 163, (2007).

window should not be sufficiently unusual or extreme so as to call into question whether the normal historical relationship between the stock and the general market or comparable firms within the industry is being accurately quantified in the estimation of the market model.

Once market and industry effects are controlled for within a statistical model using an estimation window, standard statistical tests can then be conducted on the remaining unexplained price movements (often referred to as the firm-specific, residual or abnormal price return) to test for significant price changes that may indicate the presence of new, material, firm-specific information to the market. The statistical significance of a stock price change can be assessed either in terms of percentage returns (say, the statistical significance of a 20% negative price reaction when a stock falls from $5 to $4) or in terms of a dollar reaction (say, the statistical significance of the $1 price drop when a stock falls from $5 to $4). These two assessments of the statistical significance of firm-specific stock return reactions and firm-specific dollar price reactions are not necessarily equivalent.[16]

A commonly accepted metric of statistical significance for a stock price change used in the finance and accounting literature is significance at the 5% level.[17] These tests of the statistical significance of the firm-specific price movement take into account the normal random movements in stock prices. These normal random stock price movements are accounted for by using the stock price volatility as measured over the estimation window.

Even if a statistically significant firm-specific price movement, whether it would be a firm-specific stock return or dollar price reaction, has been properly measured on a particular day, the researcher attempting to interpret the import of such a firm-specific price movement must bear in mind a fundamental limitation to any event study analysis. As is widely recognized in the finance and accounting literature, event studies alone can neither determine what information is related to revelation of alleged actionable

[16] See Ferrell, Allen and Atanu Saha, "Event Study Analysis: Correctly Measuring the Dollar Impact of an Event" *The Harvard John M. Olin Discussion Paper Series* (2011): 1-13.

[17] See, e.g., James Stock and Mark Watson, INTRODUCTION TO ECONOMETRICS, p.68 ("In many cases, statisticians and econometricians use a 5% significance level.") (2003). See also Coffman, ¶51 ("However, if on a particular day we observe an abnormal return that has a t-statistic of a magnitude greater than 1.96 ('statistically significant') and we observe new firm-specific information, we reject randomness as the explanation and infer that the new information is the cause of the stock price movement.")

misconduct nor can event studies separate out different pieces of firm-specific information disclosed simultaneously. Thus, though a corrective disclosure may be associated with a statistically significant price movement in a corporation's stock, one must consider the possibility that other news (generally referred to as "confounding news") influences stock price movement on the day in question. Event studies, even properly conducted, can only identify statistically significant firm-specific price changes on a particular day. As Ronald Gilson and Bernard Black in their textbook THE LAW AND FINANCE OF CORPORATE ACQUISITIONS (in the chapter entitled "Event Studies") explain:

> "An event study can tell us that something happened, but it can't tell us *why*. To explain positive or negative abnormal returns, we must closely examine the events and institutions involved. If the market's response was based on a strategy which the investigator does not understand, the [abnormal return] results, though technically accurate, will be used to support an inaccurate explanation of what occurred. The event study technique does not eliminate the need to assess cause through deductive reasoning; it only – though this is substantial – helps delineate what needs to be explained."[18]

This consideration can be quite important if a researcher is attempting to use a statistically significant firm-specific price reaction to infer whether a specific piece of information released on a particular day was material. In making such an assessment it is often necessary to examine all of the information released at the same time, including confounding firm-specific information unrelated to the alleged misrepresentations or omissions, and the market's reactions to this information.

2. Event Study Analysis of Bank of America Stock

The Complaint alleges that on each of the five corrective disclosure dates information concerning Merrill Lynch's bonus payments and/or Merrill Lynch's 4Q 2008 losses was revealed for the first time to the market; that material information, according to the Complaint, was inadequately disclosed to the market earlier. Assuming that plaintiffs' expert, Mr. Coffman, is correct that the market in Bank of America common stock was efficient during this time, one would expect to observe negative price reactions

---

[18] Ronald Gilson and Bernard Black, THE LAW AND FINANCE OF CORPORATE ACQUISITIONS (Second Edition 1995), p.221.

in that market on the day that the corrective disclosures of this allegedly material information occurred (or the next trading day if the disclosure occurred after the market was closed). And, indeed, the Complaint does allege that there are negative stock price reactions in response to the purported corrective disclosures. (Complaint, ¶¶ 273 – 280).

On the other hand, if the purported corrective disclosures that occurred on these five dates were not material, one would not expect to observe statistically significant negative stock price reactions to these disclosures (putting aside the issue of confounding information in which case one could observe a negative stock price even if the corrective disclosure were not material). My qualitative analysis indicates a lack of an evidentiary basis to conclude that these purported corrective disclosures did in fact release material information given the total mix of information that existed at the time. I will now test this conclusion using an event study.

Estimation Window

For my estimation window, I utilized the 87 days constituting the putative Rule 10b-5 class period (running from September 18, 2008 to January 21, 2009 inclusive) plus an additional 87-days post-class period so that my estimation window runs from September 18, 2008 to May 28, 2009 (inclusive).[19] I exclude from my estimation window (through the use of an indicator dummy) the Complaint's alleged misrepresentations date; potential corrective disclosures thereof; and all the Bank of America's earnings announcements during this period so they will not affect my estimation of the market model. Assuming the allegations in the Complaint are true, the alleged misrepresentations and potential disclosures thereof could potentially constitute material firm-specific information and could therefore bias the estimation of the market model. Bank of America's earnings announcements are obvious candidates for dates on which material firm-specific information might be released and were likewise excluded.

[19] "There are three general choices for the placement of an estimation window: before the event window, surrounding the event window, and after the event window." "The estimation window is often placed at one of [the latter two] locations rather than before the event window because of a lack of relevant prior trading history (for example, because the event window comes shortly after an IPO or change in regulatory environment)." Tabak, David and Frederick Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom" *National Economic Research Associates*, Working Paper #34 (1999): 1-34.

I decided to include the additional 87 days from the post-class period given the highly unusual nature of the markets during the putative class period.[20] September 15, 2008 — only three days before the alleged 10b-5 class period began — was the date that Lehman Brothers filed for bankruptcy. The markets were experiencing unprecedented volatility and disruption in the period immediately following the Lehman Brothers bankruptcy filing. In addition to Lehman Brothers, there were serious problems encountered by a number of other large institutions including AIG, Washington Mutual (which filed for bankruptcy on September 26, 2008), Fannie Mae and Freddie Mac.[21] An indication of the unprecedented nature of the markets during this time is the behavior of The Chicago Board Options Exchange Volatility Index ("VIX"), which measures market volatility and uncertainty based on the 30-day expected volatility of the S&P 500 index.[22] The VIX reached unprecedented levels precisely during the putative class period as can be seen in Exhibit 3. I note in this connection that despite the highly unusual nature of the markets during the putative class period, Mr. Coffman's estimation window is based solely on the putative class period. In my opinion, that is inappropriate because, as I stated above, market conditions during the estimation window should not be sufficiently unusual or extreme so as to call into question whether the normal historical relationship between the stock and the general market or comparable firms within the industry is being accurately quantified in the estimation of the market model.

<u>Industry Control</u>

In order to select an appropriate industry index of comparable firms to Bank of America and Merrill Lynch using an objective methodology, I proceeded in three steps. First, I analyzed whether a pre-existing industry control would be suitable to use as an industry control. To this end, I considered both the S&P 500 Financial Industry Index[23]

---

[20] I could not use pre-class period days in my estimation window as there simply was no Bank of America-Merrill Lynch combined entity or a merger agreement contemplated such an entity in existence prior to the putative class period. Bank of America's acquisition of Merrill Lynch was announced on September 15, 2008.

[21] A chronology of the extraordinary market events in the fall of 2007 can be found at: Federal Reserve Bank of St. Louis, "The Financial Crisis: A Timeline of Events and Policy Actions," available at http://timeline.stlouisfed.org/pdf/CrisisTimeline.pdf.

[22] Chicago Board Options Exchange, "The CBOE Volatility Index - Vix," 2009, pp. 3-4, available at http://www.cboe.com/micro/vix/vixwhite.pdf.

[23] Mr. Coffman uses the S&P 500 Financial Industry Index in his event study. (Coffman ¶ 48).

and the Dow Jones Financials Index. Both of these indexes, I concluded, were inappropriate as an industry control for Bank of America. As can be seen from Exhibit 4A, only 53% of the firms in the S&P 500 Financial Industry Index are actually banks or financial services firms. For the Dow Jones Financials Index, the percentage of firms in this group is only 46%. A substantial number of the firms in the S&P 500 Financial Industry Index and Dow Jones Financials Index are real estate companies, 18% and 29% respectively, and insurance companies, 28% and 24% respectively. In addition to including non-banking firms such as Vornado Realty Trust and Unum Group, these indices also include non-financial firms such as Moody's Corp and professional services firm Marsh & McLennan. It is difficult to see how many of these firms are comparable to Bank of America, one of the largest commercial banks, or Merrill Lynch, one of the largest investment banks at the time. Exhibit 4B lists a few examples of firms that are included in the S&P 500 Financial Index and that, in my opinion, are comparable to neither Bank of America nor Merrill Lynch.

Given the unsuitability of these indexes as industry controls, I turned to my second step which involves constructing an appropriate industry index consisting of comparable firms (see Appendix C).[24] I analyzed 327 analyst and industry reports as well as the SEC filings for Bank of America and Merrill Lynch over the January 1, 2008 – October 19, 2009 time period. I identified firms that were identified in these publications as a "peer firm" to either Bank of America or Merrill Lynch and ranked peer firms from the most frequently mentioned to the least frequently mentioned for Bank of America and Merrill Lynch.[25]

I then selected the ten most frequently mentioned peer firms to Bank of America[26] and the ten most frequently mentioned peer firms to Merrill Lynch for inclusion in my industry index. Excluding overlap, this procedure resulted in a total of seventeen peer firms. A value-weighted industry control was constructed from these seventeen peer

[24] Mr. Coffman, in contrast, uses as his industry control the S&P 500 Financial Index (minus Bank of America and Merrill Lynch). (Coffman, ¶48).
[25] I dropped Lehman Brothers as a candidate given its bankruptcy filing on September 15, 2008.
[26] There was a tie for tenth place for Bank of America so all firms were included.

firms which I will call the "Peer 17 Index."[27] Not surprisingly, many of the Peer 17 Index firms are the very largest banks and financial services firms by market capitalization in the S&P 500 Financial Index, firms such as JP Morgan, Wells Fargo, Goldman Sachs and Citigroup.

Event Study Results: Corrective Disclosures

Exhibit 5 reports the results of my event study using my estimation window and the Peer 17 Index as a control.[28] The Peer 17 Index is statistically significant (at the 5% level) with a coefficient value of 1.31. This exhibit presents the statistical significance of the five purported corrective disclosure dates both in terms of stock return and dollar price reactions. My event study results are robust to excluding the Merrill Lynch bonus payment disclosure days from the estimation window.

Of the five purported corrective disclosure dates, only January 15, 2009 and January 22, 2009 are statistically significant. The other three purported corrective disclosure dates (January 12, 2009; January 13, 2009; and January 16, 2009) are not statistically significant whether one examines stock returns or dollar price reactions. However, for the reasons explained in the previous section, on each of the purported corrective disclosure dates of January 15 and 22 there was significant confounding news in the market so as to make it impossible to reliably attribute these stock price reactions to either the *Wall Street Journal* article of January 15, 2009 or the *Financial Times* story of January 21, 2009. Such an attribution is particularly problematic in light of my qualitative analysis that the total mix of information already reflected this information.

In sum, my quantitative materiality analysis confirms the conclusions of my qualitative analysis to the extent that three of plaintiffs' five alleged corrective disclosure dates (January 12, January 13 and January 16, 2009) are not associated with material changes in Bank of America's stock price. As to the two remaining dates, on which the drop in Bank of America's stock price is statistically significant (January 15 and January

[27] The seventeen peer firms in alphabetical order were: Barclays, BB&T Corporation, Citigroup, Credit Suisse, Fifth Third, Goldman Sachs, JP Morgan, Key Corp., Lazard, Morgan Stanley, Nomura, Regions Financial, Sun Trust, UBS, US Bancorp, Wachovia, and Wells Fargo.

[28] I also ran the regression using the S&P 500 Index as an additional control variable. The results did not qualitatively change. Given the coefficient on the S&P 500 Index was statistically insignificant I report results just using the Peer 17 Index as a control.

22, 2009), the corrective information as alleged by the plaintiffs was already known in the marketplace. Furthermore, as I will now discuss, there was other confounding news in the market on these days.

Confounding Information: January 15 and 16, 2009

The Complaint alleges that on January 15, 2009, *The Wall Street Journal* reported that Merrill Lynch had suffered "larger-than-expected" but unquantified fourth quarter losses. But that article, which did not itself attempt to quantify those losses, — indeed, the article noted that "[i]t is not known exactly how much Merrill lost [in the fourth quarter]" — contained other information about Bank of America that could well have resulted in a statistically significant impact on its stock price that day. That additional information included the news that the U.S. government was close to finalizing a deal to give billions in additional aid to Bank of America, that (apart from Merrill Lynch) Bank of America itself might report a loss in Q4 2008 (the first quarterly loss suffered by the bank since 1991) and that Bank of America could potentially cut its dividend.

Amidst this bad news, as the *Los Angeles Times* reported on January 15, the "hottest rumor on Wall Street today was that the government was planning to effectively nationalize Citigroup Inc. and Bank of America Corp., perhaps as early as this weekend. That talk has devastated many financial stocks, and hammered the broader market for a second straight session." Any of these new pieces of information had the potential to drive Bank of America's stock price down on January 15, 2009.

In order to be scientifically valid, any attribution of the negative stock price reaction to the Merrill Lynch loss discussion in *The Wall Street Journal* article on January 15, 2009 would have to disentangle whatever negative stock price reactions that occurred as a result of the other confounding news also contained in that article.

Though my event study shows that Bank of America stock did not suffer a statistically significant drop on January 16, 2009, in view of Mr. Coffman's assertion to the contrary, I examined whether there was any confounding news in the market that day that might have caused Bank of America stock to decline (albeit to a statistically

insignificant extent).[29] On January 16, 2009, Bank of America not only disclosed Merrill Lynch's Q4 2008 results, it also released its own results for the quarter – a loss of $1.8 billion.[30] Exhibit 6 presents various analyst commentaries in the aftermath of the January 16, 2009 disclosures. As this Exhibit documents, there were analysts stating that Bank of America's January 16, 2009 results were worse than expected. For example, RBC Capital Markets stated: "The core loss of (-$0.44) widely missed both our $0.10 estimate and the consensus of $0.08 ... ".[31] In addition, there were news stories on this day discussing the possibility "that both Bank of America and Citigroup could be nationalized at taxpayer expense."[32] Finally, there were also news stories on this day concerning the receipt by Bank of America from the government of $20 billion in TARP funding and asset protection for $118 billion in assets.[33] Indeed, the Complaint itself states that the January 16, 2009 disclosure of Bank of America's receipt of TARP funding as one of the causes of Bank of America's price decline on January 16, 2009 (Complaint, ¶275).[34] Each of these additional revelations on January 16 could have resulted in a decline in Bank of America's stock price that day such that it is not possible to attribute the entire stock drop to the disclosure of Merrill Lynch's actual Q4 2008 results.

Confounding Information: January 22, 2009

As to the purported corrective disclosure date of January 22, 2009, there was likewise significant confounding information in the market on that day. That morning, CNBC reported that Ken Lewis, the CEO of Bank of America, and John Thain, the CEO of Merrill Lynch, were to have an "emergency meeting." CNBC also speculated that the meeting would "center on Thain's future with the firm, whether he stays or goes." Later that morning, CNBC reported that Thain would resign immediately. These reports could

[29] Mr. Coffman's discussion of January 16, 2009 fails to address the issue of confounding information. (Coffman, ¶ 54).
[30] SEC, EDGAR, Bank of America Press Release, January 16, 2009.
[31] RBC Capital Markets, "BAC: 4Q08 EPS Fall Short; Government Provides Loss Backstop and Capital Infusion," p.1 (January 20, 2009).
[32] See Rucker, P. and Stempel, J., "Bank of America Gets Big Government Bailout," Reuters, January 16, 2009.
[33] Bloomberg, L.P., "Bank of America Gets $138 billion in U.S. Funds, Asset Backstop," January 16, 2009.
[34] See also Complaint, ¶182 ("The $24 billion of preferred shares that BoA was required to sell to the U.S. Government under the terms of the bailout . . . severely reduc[ed] shareholder returns, and dilute[ed] the value of BoA common stock by approximately thirty cents per share for 2009.")

have resulted in Bank of America's stock price decline on January 22. These reports and prior market reports concerning Mr. Thain's status at Merrill Lynch leading up to the definitive reports of his departure are detailed in Exhibit 7. Furthermore, nearly a week earlier, on January 16, Merrill Lynch had disclosed to the market its actual compensation and benefits expenses – which included its bonus payments – in its Form 8-K filing for the 4Q 2008.

Event Study Results: Prior Bonus News

My event study also shows that there were no statistically significant price movements for Bank of America common stock on September 18, 2008 — the date defendants' first alleged misrepresentation regarding Merrill Lynch's intention to pay bonuses on 2008 — or on any of the other dates on which the Complaint alleges that Merrill Lynch's intention to pay bonuses was misrepresented (including the dates that each iteration of the proxy was filed with the SEC). Furthermore, there were no statistically significant price movements for Bank of America stock on any of the dates (discussed at pp. 14-15 above) on which (a) Merrill Lynch reported its compensation accruals relating to the third quarter of 2008, (b) the media reported that Merrill Lynch intended to pay billions of dollars of bonuses, or (c) the press first reported that the merger agreement imposed a "cap" on the amount of bonus payments Merrill Lynch could make. These results are presented in Exhibit 8. Mr. Coffman's event study analysis also shows that none of these days are statistically significant.[35] Accordingly, the economic evidence is inconsistent with the allegation that defendants' alleged misrepresentations regarding Merrill Lynch's intention to pay bonuses were material.

The fact that none of the prior news regarding Merrill Lynch's bonus payment is statistically significant undermines any attempt to attribute the stock price drop on January 22, 2009 to the *Financial Times* article on the preceding day, particularly given the other confounding news on January 22, 2009.

[35] See column labeled "Abnormal_Ret_T" in COFFMAN0000019-21.

Event Study Results: Morgan Stanley Estimate of 4Q 2008 Losses

Finally, as discussed previously, on December 7, 2008, a Morgan Stanley analyst released a report in which she estimated Merrill Lynch's losses at $11 billion and further commented that these losses were already incorporated into the share price. My event study analysis shows that the following trading day, December 8, 2008, Bank of America's share price did not exhibit a statistically significant price reaction to this news.[36] The absence of a statistically significant stock drop in response to the Morgan Stanley report provides additional support to the conclusion that, at the time of the shareholder vote, the alleged information available to Bank of America regarding Merrill's interim 4Q losses was not material.

This finding is also consistent with the analyst's statement that the estimated writedown had "already been reflected in [Bank of America's] share price." I further note that in his event study Mr. Coffman also did not find a statistically significant stock price drop on December 8; to the contrary, he found a statistically significant stock price *increase*.[37] This finding is inconsistent with the market perceiving the report that Merrill Lynch would suffer $11 billion in losses in the 4Q 2008 being material adverse news.

IV. THE ECONOMICS OF RULE 10B-5 AND SECTION 14(A) DAMAGES

A. ECONOMICS OF RULE 10B-5 DAMAGES

Damages in Rule 10b-5 "fraud on the market" class actions – direct actions by a specific group of security holders typically against a company (and often various of its directors and officers) – are based on the "out of pocket" losses of the class members. As an economic matter, this involves calculating the damages suffered by those class member security holders when they purchased the security at a price "inflated" as a result of the alleged misrepresentation or omission — a security which later fell in value when the "inflation" was removed by the revelation of the omitted information or the truth concerning the misrepresentation (a so-called "corrective disclosure"). Measuring

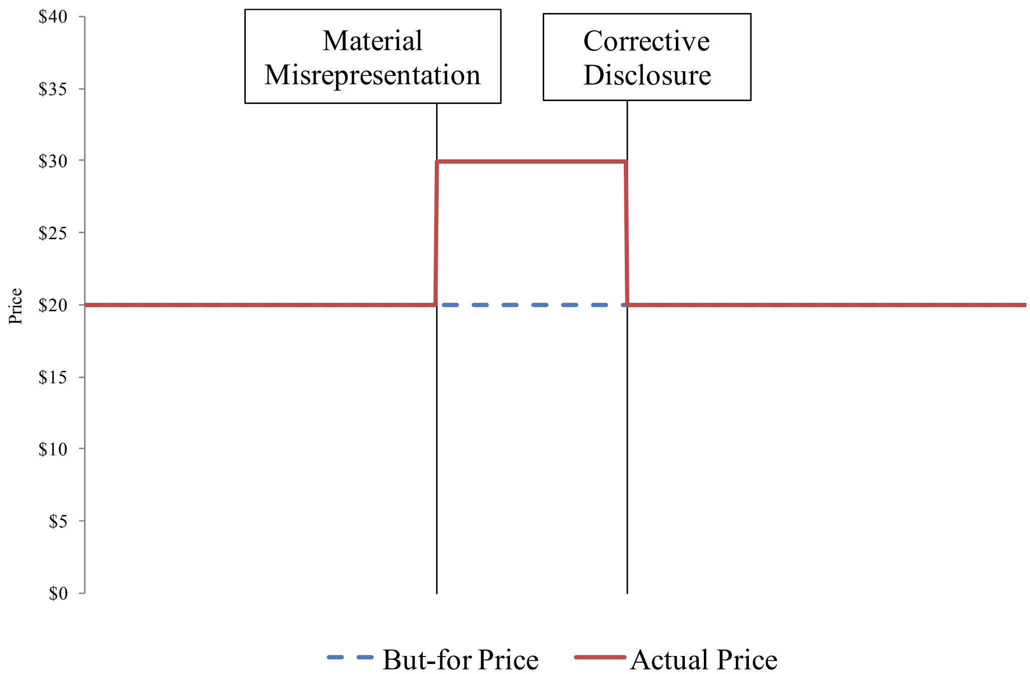
[36] On December 8, 2008, the abnormal return for Bank of America's share price had a coefficient of 0.06 and a t-statistic of 1.19. For abnormal dollar impact, the coefficient is 0.96 and the t-statistic is 1.20.
[37] Mr. Coffman reports an abnormal return of 10.3% and a t-statistic of 3.2 for December 8, 2008. See COFFMAN0000020.

"inflation" as an economic matter involves estimating the difference between the market price of the security and the price the security would have had if the defendants had adequately disclosed the allegedly material information throughout the class period.[38] Of course, this implies, as has been long recognized in the academic literature that for damages so calculated there is a corresponding gain by another set of investors, i.e. the investors who purchased their securities at an uninflated price prior to the fraud and then managed to sell their securities at an "inflated" price before the corrective disclosure was made.

The goal of the Rule 10b-5 fraud on the market securities damages exercise is therefore to estimate the losses suffered by the subset of investors who were damaged "in connection with the purchase or sale" of the security, not the net effect on all holders of the corporation's shares. To illustrate this point graphically, I will present a stylized example of a Rule 10b-5 "fraud on the market" class action matter. Suppose a Rule 10b-5 "fraud on the market" class action case consisted of one material misrepresentation and one corrective disclosure revealing the misrepresentation at a later point in time. Further suppose that there are no factors other than the material misrepresentation and the corrective disclosure affecting the security price, factors such as confounding firm-specific information or market and industry movements. The estimate of inflation during the class period in this stylized example might look something like this:

[38] See Ferrell & Saha, "Forward-casting 10b-5 Damages: A Comparison to Other Methods" *forthcoming* Journal of Corporation Law. See also the seminal articles of Cornell & Morgan (1990); Fischel (1982).

Figure 1. A Hypothetical Example of
Material Misrepresentation and Subsequent Corrective Disclosure



In this particular example, the class members cannot be defined as a matter of logic and economics in terms of a holder class but must rather be defined both by reference to when they purchased the security and whether they held that security through the corrective disclosure.

Within this broad framework of Rule 10b-5 damages, of course, there are any number of issues that must be confronted, such as how to measure "inflation" given various issues, such as confounding information in connection with a corrective disclosure or what in fact constitutes a "corrective disclosure." But regardless of the resolution of these specific issues, the central analytical point remains: Rule 10b-5 "out of pocket" damages are concerned with measuring the extent to which class members suffered losses as a result of paying another set of investors too much (as a result of the security's price being "inflated") for the security.

The basic redistributive nature of the Rule 10b-5 damage analysis has been consistently recognized by proponents of Rule 10b-5 class action claims, by critics of Rule 10b-5 class action claims, and in the general academic commentary on Rule 10b-5

damages. The following are examples from this literature by a range of academics and commentators:

● "As a result, securities litigation in this context inherently results in a wealth transfer between two classes of public shareholders—those in the class period and those outside it . . ."[39]

● "In fraud on the market, for every shareholder who *bought* at a fraudulently-inflated price, another shareholder has *sold*: the buyer's individual loss is offset by the seller's gain."[40]

● "[S]hareholder suits reallocate funds to injured shareholder purchasers from current shareholders. The injured shareholders paid substantially more for a share of the corporation due to the fraud than did the current holders. Thus, a suit merely seeks to readjust this disparity somewhat."[41]

● "Consider a case in which a manager of a firm recklessly announces that the firm has made a fabulous invention that will be worth billions. The price of the firm's stock soars. Two days later the manager sheepishly announces that it was all a false alarm, and the price returns to the original level. Everyone who bought stock during these two days suffers a substantial loss; neither the manager nor the firm gets any gain. Those who violated the rule get no profit. There is, of course, a match between profit and loss; the buyers' loss is exactly offset by gains realized by those who sold stock during the two days."[42]

Simply put, Rule 10b-5 damages, given that they are direct actions brought on behalf of specific security holders, measure harm suffered by a subset of a firm's security holders, the subset of investors who purchased their shares at artificially inflated prices and subsequently suffered a compensable loss as a consequence. Moreover, and crucially,

---

[39] John C. Coffee, Jr., "Reforming the Securities Class Action: An Essay On Deterrence and Its Implementation", p. 1557 (Columbia Law Sch. Ctr. for Law & Econ. Studies, Working Paper No. 293, 2006)

[40] A.C. Pritchard, "Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers," 85 VA. L. REV. 925, 939 (1999)

[41] Eisenhofer & Levin, "Investor Litigation in the U.S. – The System is Working," Securities Reform Act Litigator Report (2007).

[42] Frank Easterbook & Daniel Fischel, "Optimal Damages in Securities Cases," 52 U.Chicago L.Rev. 611, 635 (1985).

this subset of security holders cannot as a matter of logic and economics be defined by a class of holders of a firm's securities.

B. ECONOMICS OF SECTION 14(A) DAMAGES

For direct Section 14(a) claims, damage analysis involves measuring the harm suffered by a particular shareholder or group of shareholders with respect to a specific transaction authorized by the proxy statement containing the alleged disclosure deficiency. This economic analysis typically involves shareholders of an acquired firm allegedly suffering losses as a result of receiving inadequate consideration for their shares in a merger transaction. In such a situation, the direct Section 14(a) claim could potentially consist of a holders class if the allegation were that all the shareholders of the acquired firm were misled into voting to exchange their shares for inadequate consideration and hence all the shareholders of the acquired firm should receive additional consideration, e.g., additional shares in the acquirer. Acquired company shareholders in this setting are akin to defrauded sellers of their shares; the potential basis for damages for this class could be the difference between the amount they should have received for their shares absent the defective proxy statement and the amount they actually received. Where, by contrast, shareholders of the *acquiring* firm allege that they were misled by a defective proxy statement into approving the acquisition of another company at, say, too high a price, the acquiring corporation itself is the injured party. The acquiring company shareholders have not exchanged their shares, and they continue to hold shares in the acquiring company. As such, the acquiring company shareholders suffer damages, if any, only indirectly by virtue of their ownership interest in the acquiring corporation.

Neither theory of harm is alleged in the Complaint. First, Bank of America shareholders did not transact their shares as a result of the merger. Rather, the Complaint's Section 14(a) holders' claim sets forth as the cognizable harm to shareholders the harm resulting from the alleged disclosure deficiencies and the revelation thereof, i.e. exactly the harm measured by Rule 10b-5 damages. Specifically, the Complaint in ¶ 338 states when setting forth the Section 14(a) claim:

> The false statements and omissions as set forth above proximately caused foreseeable losses to Lead Plaintiffs and members of the Class, as the risks concealed by these false and misleading statements and omissions materialized through a series of partial disclosures, causing BoA stock to fall from $12.99 at the close of trading on January 9, 2009, the day preceding the first corrective disclosure, to $5.71 at the close of trading on January 22, 2009, as set forth more fully above at ¶¶273-280.

In turn, ¶¶ 273-280 of the Complaint identifies the five purported corrective disclosure dates (January 12, 2009; January 13, 2009; January 15, 2009; January 16, 2009; and January 22, 2009) along with the allegations that there were associated stock price drops in reaction to these disclosures. These purported corrective disclosures and the associated stock price drops are again identical to those alleged in the Complaint's Rule 10b-5 claims (Complaint, ¶271). In essence, the Complaint engrafts onto plaintiffs' Section 14(a) claim a Rule 10b-5 theory of recovery. It seeks to recover for a class of holders of Bank of America stock — whether or not they purchased their shares at artificially inflated prices — the damages that are normally applicable as an economic matter to purchasers of artificially inflated shares.

This Section 14(a) damage theory is fundamentally at odds as an economic matter with a Rule 10b-5 theory of harm. Within the 10b-5 framework, there must be a direct connection between the event at issue and harm to the shareholder with the shareholder itself engaging in a transaction (a purchase or sale).[43] As emphasized in Section A, shareholders injured as a result of the purported corrective disclosures must have purchased their shares at an inflated price to have experienced harm. The Complaint does not allege that shareholders who purchased their shares prior to the alleged misstatements on September 18, 2008 paid an "inflated" price (Complaint, ¶285). Therefore, even if these shareholders were holders as of October 10, 2008, they could not have suffered any harm as a result of the disclosures concerning Merrill Lynch made in January 2009 after it had been acquired by Bank of America. The only shareholders who could conceivably have suffered economic harm, accepting the Complaint's allegations as true, are those

[43] In sharp contrast, a traditional derivative damages analysis is exactly the opposite: there must be a direct connection between the event and harm to the corporation, with shareholders suffering injury indirectly by reason of their ownership interest in the corporation, and the corporation – not the shareholder – engaging in the transaction (a sale, a merger, etc.).

who purchased their Bank of America shares after the alleged misrepresentations and omissions, exactly the same shareholders as represented in the putative Rule 10b-5 class.

The inappropriateness of the Complaint's Section 14(a) class definition and damage theory as a matter of economic logic is best illustrated by the following examples:

Example 1: Purchased before September 18, 2008 and held thereafter.

First consider a shareholder who purchased his Bank of America shares at fair market value at any point prior to September 18, 2008 – the start of the putative Rule 10b-5 class period — and continued to hold his shares as of the record date of October 10 and through the end of the putative class period. The Complaint includes this shareholder as a member of the proposed Section 14(a) holders class even though, accepting the Complaint's allegations as true, he purchased his shares before any of the alleged misstatements or omissions and did so at a price that was not inflated. During the putative class period, moreover, this shareholder never engaged in a transaction (let alone a transaction that resulted in harm to the shareholder); he was simply eligible to vote on the merger by virtue of being a record holder on October 10. After the December 5, 2008 vote, and indeed after the closing of the merger on January 1, 2009 the shareholder held the exact same number of Bank of America shares as he did before the vote.

As an economic matter, this shareholder did not suffer any direct economic injury as a result of the alleged Section 14(a) violations. Because he did not purchase his shares at an inflated price or otherwise engage in a transaction that caused him economic injury, this shareholder did not suffer any direct harm as a result of the inflation that was allegedly introduced into the stock price beginning on September 18, 2008. If Bank of America shareholders were misled into approving the merger with Merrill Lynch (as the Complaint alleges) at, say for example, too high a price, that might potentially have diminished the value of Bank of America, but any harm to this shareholder from such overpayment was, at best, indirect – injury that is simply a reflection of and in proportion to the shareholder's ownership interest in the Bank, for which the remedy is derivative rather than direct in nature.

Example 2: Purchased on or after September 18, 2008 and held thereafter

According to the Complaint, a shareholder who purchased, say, on September 19, 2008, the day after the first alleged misrepresentation was made, and continued to hold his shares thereafter would be a member of both the Section 14(a) and Rule 10b-5 putative classes. This shareholder would not as an economic matter have a claim for damages relating to the alleged disclosure deficiencies concerning Merrill Lynch's 4Q losses as that quarter had not even begun at the time of his purchase. The remaining alleged disclosure deficiency relates to the Merrill Lynch bonus payments.

Even accepting the Complaint's allegations as true, the shareholder in this example is differently situated in terms of potential harm from the shareholder in example 1. The shareholder in example 2 allegedly purchased his shares at an inflated price (based on the alleged bonus misrepresentation on September 18, 2008), while the shareholder in example 1 did not. Nevertheless, the Complaint would treat the shareholder in example 1 and the shareholder in example 2 precisely the same for purposes of the Section 14(a) claim. The Complaint seeks to recover for both shareholders the stock price drop allegedly resulting from the January, 2009 corrective disclosures even though one shareholder allegedly purchased his shares at an artificially inflated price and the other did not.

Moreover, the Complaint would include the example 2 shareholder in the Section 14(a) holders class not because he purchased his shares at an inflated price, but solely by virtue of his having held shares on the October 10, 2008 record date for determining eligibility to vote on the merger and it does so even though this shareholder did not engage in any transaction resulting in harm due to the alleged disclosure deficiencies regarding Merrill Lynch's 4Q interim losses. But, as to this shareholder too, any potential harm that resulted from the merger authorized by the allegedly misleading proxy as a result of the undisclosed Merrill Lynch losses was harm caused to Bank of America flowing from its acquisition of Merrill Lynch. The economic injury, if any, to this shareholder due to that acquisition is merely a consequence of his ownership interest in Bank of America and is therefore as an economic matter indirect in nature.

Example 3: Purchased on or after October 11, 2008

According to the Complaint, a shareholder who purchased on or after October 11, 2008 can be a member of the putative Rule 10b-5 class but not the Section 14(a) class because he purchased his shares *after* the record date. Despite the fact that this shareholder cannot be a member of the Section 14(a) class, the Complaint apparently seeks to recover damages for this shareholder on the same basis as it does for the shareholders in examples 1 and 2 — by reference to the January, 2009 stock drops.

These examples demonstrate the economic illogic of the Complaint's Section 14(a) claim for direct damages to the holders class. By seeking to recover damages for a class of holders on the basis of stock drops that allegedly occurred weeks after the December 5, 2008 shareholder vote, the Complaint attempts to engraft a Rule 10b-5 remedy onto a Section 14(a) direct claim. In doing so, it seeks to recover the same stock-drop based damages for shareholders who allegedly purchased their shares at artificially inflated prices and shareholders who did not. And because the putative Section 14(a) class includes shareholders who did not engage in any transaction that resulted in direct harm to them (such as the shareholder from example 1), their harm (if any) must be indirect in nature. Indeed, the harm, if any, resulting from the merger for *all* shareholders of the acquiring company is, as an economic matter, necessarily indirect. The alleged inflation that was removed from the market for Bank of America shares at the time of the alleged January 2009 stock drops is not a logical measure of their injury.

C. THE PUTATIVE HOLDERS CLASS IS OVER-INCLUSIVE GIVEN CROSS-OWNERSHIP

Putting aside the issues raised in the preceding sections, there is another fundamental problem with the Complaint's class definition. There is no adjustment in the definition of the class for the fact that Bank of America shareholders held a substantial number of shares of Merrill Lynch during the relevant time period. This is important because, if Bank of America overpaid for Merrill Lynch, the holders of Merrill Lynch stock were the direct recipients of that overpayment. Thus, to the extent that the members of the putative Section 14(a) class were also holders of Merrill Lynch common

stock, failure to adjust for their Merrill Lynch holdings would result in their being compensated for "losses" they did not incur (even indirectly).

This implies that if, say, a Bank of America shareholder owned 100 shares of Bank of America stock on October 10, 2008 and the equivalent of 100 shares of Bank of America stock in Merrill Lynch,[44] this shareholder should not be a member of the putative class. Likewise, if a shareholder held 100 shares of Bank of America stock and the equivalent of 80 shares of Bank of America stock in Merrill Lynch, only 20 shares should be considered part of the shareholdings included in the definition of the class.

A review of institutional investors' holdings from 13-F filings shows that this cross-ownership issue affects a meaningful number of Bank of America shares. I gathered information from 13-Fs on institutional investors' holdings of Bank of America and Merrill Lynch stock as of September 30, 2008 and December 31, 2008. These are the two dates closest in time to October 10, 2008 that are obtainable from the institutional investor data disclosed in the quarterly 13-Fs. I then calculated the percentage of Bank of America shares held by institutional investors that were offset by holdings of Merrill Lynch institutional shares on these two dates. The results of this analysis are presented in Exhibit 9. As Exhibit 9 documents, approximately 20% of all Bank of America institutional investors' shares are offset by Merrill Lynch shares as of September 30, 2008, representing 552,821,414 Bank of America shares, and approximately 24% of all Bank of America institutional investors' shares as of December 31, 2008, representing 984,626,783 Bank of America shares. Of course, these figures are underestimates of the percent of Bank of America shareholders that cannot be part of the Section 14(a) class given the fact that these numbers are based solely on institutional share holdings.

I declare under penalty of perjury under the laws of the United States of America that the forgoing is true and correct.

Allen Ferrell, Ph.D.
September 16, 2011

[44] Based on the merger exchange ratio of 0.8595 shares of Bank of America stock for each Merrill Lynch share.

Appendix A

Allen Ferrell

Harvard Law School
Cambridge, Massachusetts 02138
Telephone: (617) 495-8961
Email: fferrell@law.harvard.edu

CURRENT POSITIONS

Greenfield Professor of Securities Law, Harvard Law School

Member, American Law Institute Project on the Application of U.S. Financial Regulations to Foreign Firms and Cross-Border Transactions

Member, ABA Task Force on Corporate Governance

Fellow, Columbia University's Program on the Law and Economics of Capital Markets

Faculty Associate, Kennedy School of Government

Research Associate, European Corporate Governance Institute

EDUCATION

Massachusetts Institute of Technology, Ph.D. in Economics, 2005
Fields in econometrics and finance

Harvard Law School, J.D., 1995, *Magna Cum Laude*

- Recipient of the *Sears Prize* (award given to the two students with the highest grades)
- Editor, *Harvard Law Review*

Brown University, B.A. and M.A., 1992, *Magna Cum Laude*

PREVIOUS POSITIONS

Harvard University Fellow
Harvard Law School, 1997

Law Clerk, Justice Anthony M. Kennedy
Supreme Court of the United States; 1996 Term

Law Clerk, Honorable Laurence H. Silberman
United States Court of Appeals for the District of Columbia; 1995 Term

COURSES TAUGHT

Securities Regulation
Regulation of Market Structure
Law and Finance
Law and Corporate Finance
Contracts

REFEREE FOR FOLLOWING JOURNALS

Quarterly Journal of Economics
American Law and Economics Review
Journal of Corporation Finance
Journal of Law, Economics and Organization
Journal of Legal Studies

TALKS

Third Annual Structured Products Association Meeting, "Current Policy Issues Concerning Structured Products"

Annual Boston Analysts Society Meeting, "The Regulation of Structured Products"

Chairperson, Asian Exchange Conference, Singapore, "Issues Facing Asian Exchanges"

U.S. Senate Subcommittee on Securities, Insurance and Investment, "The Regulation of Cross-border Exchange Mergers"

Joint NASD/SEC Forum, "Law and Economics of Best Execution"

SEC Panel, "Econometrics of Measuring the Effects of Mandatory Disclosure"

American Enterprise Institute/Brookings Institution, "Shareholder Rights"

Brookings Institution, "Financial Innovation"

International Development Law Institute, "Corporate Law and Development"

World Bank, "Financial Market Development Indicators"

Shenzhen Stock Exchange, "Regulation of Insider Trading"

Numerous presentations at the National Bureau of Economic Research

Papers

"Thirty Years of Shareholder Rights and Firm Valuation," with Martijn Cremers, Yale ICF Working Paper No. 09-09, *revise and resubmit at Journal of Finance*

"Forward-casting 10b-5 Damages: A Comparison to other Methods" with Atanu Saha, Working Paper (2011)

"Event Study Analysis: Correctly Measuring the Dollar Impact of an Event" with Atanu Saha, Working Paper (2011)

"Calculating Damages in ERISA Litigation", Working Paper (2011)

"Securities Litigation and the Housing Market Downturn," with Atanu Saha, 35 *Journal of Corporation Law* 97 (2009)

"Legal and Economic Issues in Litigation arising from the 2007-2008 Credit Crisis," with Jennifer Bethel and Gang Hu, in PRUDENT LENDING RESTORED: SECURITIZATION AFTER THE MORTGAGE MELTDOWN (Brookings Institution Press 2009)

"The Supreme Court's 2005-2008 Securities Law Trio: *Dura Pharmaceuticals*, *Tellabs*, and *Stoneridge*," 9 *Engage* 32 (2009)

"What Matters in Corporate Governance?" with Lucian Bebchuk & Alma Cohen, 22 *Review of Financial Studies* 783 (2009)

"Do Exchanges, CCPs, and CSDs have Market Power?," *forthcoming* in GOVERNANCE OF FINANCIAL MARKET INFRASTRUCTURE INSTITUTIONS (editor Ruben Lee) (2009)

"An Asymmetric Payoff-Based Explanation of IPO 'Underpricing'," Working Paper, with Atanu Saha

"The Law and Finance of Broker-Dealer Mark-Ups," commissioned study for NASD using proprietary database (2008)

"Majority Voting" in REPORT OF THE COMMITTEE ON CAPITAL MARKETS REGULATION (2008)

"The Loss Causation Requirement for Rule 10B-5 Causes of Action: The Implications of *Dura Pharmaceuticals v. Broudo*," 63 BUSINESS LAWYER 163 (2007)

"Mandated Disclosure and Stock Returns: Evidence from the Over-the-Counter Market," 36 *Journal of Legal Studies* 1 (June, 2007)

"Policy Issues Raised by Structured Products," with Jennifer Bethel, in BROOKINGS – NOMURA PAPERS IN FINANCIAL SERVICES, Brookings Institution Press, 2007

"The Case for Mandatory Disclosure in Securities Regulation around the World," 2 *Brooklyn Journal of Business Law* 81 (2007)

"U.S. Securities Regulation in a World of Global Exchanges," with Reena Aggarwal and Jonathan Katz, in EXCHANGES: CHALLENGES AND IMPLICATIONS, Euromoney (2007)

"Shareholder Rights" in REPORT OF THE COMMITTEE ON CAPITAL MARKETS REGULATION (2007)

"Creditor Rights: A U.S. Perspective," 22 *Angler- und Glaubigerschutz bei Handelsgesellschaften* 49 (2006)

"Measuring the Effects of Mandated Disclosure," 1 *Berkeley Business Law Journal* 369 (2004)

"If We Understand the Mechanisms, Why Don't We Understand the Output?", 37 *Journal of Corporation Law* 503 (2003)

"Why European Takeover Law Matters," in REFORMING COMPANY AND TAKEOVER LAW IN EUROPE (Oxford University Press) (2003)

"Does the Evidence Favor State Competition in Corporate Law?", with Alma Cohen & Lucian Bebchuk, 90 *California L. Rev.* 1775 (2002)

"Corporate Charitable Giving," with Victor Brudney, 69 *Univ. Of Chicago Law Review* 1191 (2002)

"A Comment on Electronic versus Floor-Based Securities Trading," *Journal of Institutional and Theoretical Economics* (Spring 2002)

"Much Ado About Order Flow," *Regulation Magazine* (Spring 2002)

"On Takeover Law and Regulatory Competition," with Lucian Bebchuk, 57 *Business Lawyer* 1047 (2002)

"Federal Intervention to Enhance Shareholder Choice," with Lucian Bebchuk, 87 *Virginia Law Review* 993 (2001)

"A New Approach to Regulatory Competition in Takeover Law," with Lucian Bebchuk, 87 *Virginia Law Review* 111 (2001)

"A Proposal for Solving the 'Payment for Order Flow' Problem," 74 *Southern California Law Review* 1027 (2001)

"Federalism and Takeover Law: The Race to Protect Managers from Takeovers," with Lucian Bebchuk, 99 *Columbia L. Rev.* 1168 (1999)

EXPERT REPORTS INVOLVING DEPOSITION/WITNESS TESTIMONY

Bacon et. al. v. Stiefel Laboratories, Case No. 09-21871-CV-KING, Expert Report and deposition on July 22, 2011

Abu Dhabi Investment Authority v. Citigroup, Case No. 50148T 0065009 (Arbitration Proceeding), Expert Reports and Testimony on May 11, 2011

Nacco Industries, et al. v. Applica Incorporated, et al, Case No. 2541-N; Expert Report and deposition on December 15, 2010

Black Horse Capital, et al. v. JP Morgan Chase Bank, et al., Case No. 08-12229; Expert Report and deposition on November 28, 2010

SEC v. John Kelly, Case No. 4612; Expert Report and deposition on May 17, 2010

In re Schwab Corp. Securities Litigation, Case No. 08-cv-1510, Expert Report and deposition on January 15, 2010

In re Ticketmaster Entertainment Shareholder Litigation, Lead Case No. BC407677, Expert Report and deposition on December 3, 2009

In re Boston Scientific, Civil Action No. 1:05-CV-11934, Expert Report and deposition on October 13, 2009

In re Emulex Shareholder Litigation, Civil Action No. 4519-VCS: Expert Report and deposition on June 30, 2009

Selectica v. Trilogy, Civil Action No. 4241-VCN: Trial testimony on April 30, 2009

Selectica v. Trilogy, Civil Action No. 4241-VCN: Expert Report and deposition on February 25, 2009

In re Centerline Holding Company Securities Litigation, Civil Action No. 08-CV-00505: Expert Report and deposition on December 4, 2008

Ehrlich, Schlichtmann, v. Kerry et al., Civil Action No. 06-1403-BLS: Expert Report and deposition on November 7, 2008

In Re Mutual Funds Investment Litigation: Parthasarathy v. RS Investment Management, L.P., Civil Action No. 04-CV-3798-JFM: Expert Report and deposition on June 24, 2008

UnitedGlobalCom Shareholders Litigation, Civil Action No. 1012-N: Expert Report and deposition on November 15, 2007

Appendix B: Materials Relied Upon

Court Documents

- Consolidated Second Amended Class Action Complaint, filed October 22, 2010
- Memorandum & Order Motion to Dismiss, filed August 27, 2010
- Memorandum & Order Motion to Dismiss, filed July 29, 2011

SEC Filings/Forms

- Bank of America 8-K, September 18, 2008
- Bank of America S-4, October 02, 2008
- Bank of America S-4/A, October 22, 2008
- Bank of America S-4/A, October 29, 2008
- Bank of America DEFM14A, November 03, 2008
- Bank of America 10-Q, November 06, 2008
- Merrill Lynch 10-Q, November 07, 2007
- Merrill Lynch 8-K, January 17, 2008
- Merrill Lynch 10-Q, May 06, 2008
- Merrill Lynch 10-Q, August 05, 2008
- Merrill Lynch 8-K, October 16, 2008
- Merrill Lynch 10-Q, November 04, 2008
- Merrill Lynch 10-Q, November 05, 2008

Security Data

- Institutional Holdings Data from Bloomberg, L.P. and Thomson Financial
- Historical data for Bank of America and Merrill Lynch Common Stock, S&P 500 Total Return Index, S&P 500 Financial Index, VIX Index, and Dow Jones Industrial Average Index obtained from Bloomberg, L.P.

News

- Bank of America and Merrill Lynch news headlines and articles downloaded from Lexis Nexis, Bloomberg L.P. and Factiva for the Class Period
- Bank of America Earnings Conference Call and Press Conference transcripts for the Class Period

Bank of America Analyst Reports

- Various analyst and credit rating reports regarding Merrill Lynch, Bank of America, and general market conditions issued during the Class Period

Appendix B: Materials Relied Upon (continued)

Academic Articles/Text

- Campbell, John Y., M. Lettau, B.G. Malkiel and Y. Xu,"Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk," *The Journal of Finance* LVI, no. 1 (2001): 1-43.
- Cavaglia, Stefano, C. Brightman and M. Aked, "The Increasing Importance of Industry Factors," *Financial Analysis Journal*, (September/October 2000): 41-54.
- Chicago Board Options Exchange, "The CBOE Volatility Index - Vix," 2009, http://www.cboe.com/micro/vix/vixwhite.pdf.
- Coffee, John C. Jr., "Reforming the Securities Class Action: An Essay On Deterrence and Its Implementation," *Columbia Law Sch. Ctr. for Law & Econ. Studies*, Working Paper no. 293 (2006): 1534-1586.
- Cornell, Bradford and R. Gregory Morgan, "Using Finance Theory to Measure Damages in Fraud on The Market Cases," *UCLA Legal Review*, no. 883 (1990): 883-924.
- Easterbook, Frank and Daniel Fischel, "Optimal Damages in Securities Cases," The University of Chicago Law Review 52, no. 611 (1985): 611-652.
- Eisenhofer, Jay W. and Gregg S. Levin, "Investor Litigation in the U.S. – The System is Working," Securities Reform Act Litigaton Reporter 22, no. 5 (2007): 618-637.
- Federal Reserve Bank of St. Louis, "The Financial Crisis: A Timeline of Events and Policy Actions," http://timeline.stlouisfed.org/pdf/CrisisTimeline.pdf.
- Ferrell, Allen and A. Saha,"Event Study Analysis: Correctly Measuring the Dollar Impact of an Event", *Harvard John M. Olin Center for Law, Economics, and Business*, Discussion Paper (2011).
- Ferrell, Allen and A. Saha, "Forward-casting 10b-5 Damages: A Comparison to Other Methods," *Harvard John M. Olin Center for Law, Economics, and Business,* Discussion Paper (2011): 3-35.
- Ferrell, Allen and A. Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of Dura Pharma, Inc. v. Broudo," *Harvard John M. Olin Center for Law, Economics, and Business*, Discussion Paper no. 08/2007 (2007): 2-26.
- Fischel, Daniel R., "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," *The Business Lawyer* no. 38 (1982): 1-20.
- Gilson, Ronald and Bernard Black, *The Law and Finance of Corporate Acquisitions,* 2 ed. (The Foundation Press, Inc. 1995), 221.
- MacKinlay, C. Campbell and A. Lo,"Event Studies in Economics and Finance," Journal of Economic Literature 35, (1997): 13-39.
- Pritchard, A.C. "Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers," VA. L. Rev., no. 85 (1999): 925-939.
- Stock, James H. and Mark W. Watson, *Introduction to Econometrics,* 3 ed. (Addison Welsey: Pearson Education, Inc. 2011), 77.
- Tabak, David I. and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," *National Economic Research Associates*, no. 34 (1999): 1-34.

Appendix C: Selection of Peer 17 Firms for Bank of America and Merrill Lynch

Panel A: Banks Mentioned by Analysts as "Peers" of Bank of America[1]

		Frequency of Mentions	Peer Index Firm Number
1.	**Wells Fargo***	**18**	**1**
2.	**JPMorgan Chase***	**17**	**2**
3.	**Citigroup***	**16**	**3**
4.	**U.S. Bancorp***	**13**	**4**
5.	**SunTrust Bank**	**10**	**5**
6.	**Fifth Third**	**9**	**6**
7.	**KeyCorp**	**9**	**7**
8.	**BB&T**	**8**	**8**
9.	**Goldman Sachs***	**8**	**9**
10.	**Regions Financial**	**8**	**10**
11.	**Wachovia[2]**	**8**	**11**
12.	PNC	7	-
13.	Marshall & Ilsley	7	-
14.	Comerica Inc.	7	-
15.	BoNY Mellon	6	-
16.	M&T Bank	6	-
17.	Morgan Stanley*	5	-
18.	UBS AG*	4	-
19.	Northern Trust	4	-
20.	Credit Suisse*	4	-
21.	First Horizon	4	-
22.	Zions Bancorp	4	-
23.	National City Corp	4	-
24.	TCF Financial	4	-
25.	Lehman Brothers*	3	-
26.	State Street	3	-
27.	Barclays Capital	3	-
28.	American Express	3	-
29.	RBC	3	-
30.	Deutsche Bank*	3	-
31.	RBS	3	-
32.	Capital One	3	-
33.	Synovus Financial	3	-
34.	Huntington Bancshares	3	-
35.	Lazard	2	-
36.	HSBC	2	-

Appendix C: Selection of Peer 17 Firms for Bank of America and Merrill Lynch

Panel A: Banks Mentioned by Analysts as "Peers" of Bank of America[1]

		Frequency of Mentions	Peer Index Firm Number
37.	Washington Mutual	2	-
38.	Raymond James	2	-
39.	Sovereign Bancorp	2	-
40.	TriCo Bankshares	2	-
41.	Discover	1	-
42.	Banco Santander	1	-
43.	Alliance Data Systems	1	-
44.	Danske Bank	1	-
45.	Toronto Dominion	1	-
46.	BNP Paribas	1	-
47.	Western Union	1	-
48.	Associated Bancorp	1	-
49.	Commerce Bancshares	1	-
50.	First Merit Corp.	1	-
51.	ING	1	-
52.	Centerview Partners	1	-
53.	BMO Capital Markets	1	-
54.	CIBC World Markets	1	-
55.	Rothschild	1	-
56.	UnionBanCal	1	-
57.	New York Community	1	-
58.	ABN Amro	1	-
59.	Mitsubishi UFJ	1	-
60.	Stifel Financial	1	-
61.	Mizuho Financial	1	-
62.	Texan Capital	1	-
63.	Edward Jones	1	-

Appendix C: Selection of Peer 17 Firms for Bank of America and Merrill Lynch

Panel B: Banks Mentioned by Analysts as "Peers" of Merrill Lynch [1]

		Frequency of Mentions	Peer Index Firm Number
1.	**Morgan Stanley***	**11**	**12**
2.	**Goldman Sachs***	**9**	**already included**
3.	**Citigroup**	**7**	**already included**
4.	**Lehman Brothers***	**7**	**not applicable**
5.	**JPMorgan Chase***	**5**	**already included**
6.	**Credit Suisse***	**4**	**13**
7.	**UBS AG***	**4**	**14**
8.	**Barclays Capital**	**3**	**15**
9.	**Lazard**	**3**	**16**
10.	**Nomura**	**3**	**17**
11.	Deutsche Bank*	2	-
12.	RBS	2	-
13.	HSBC	2	-
14.	Wells Fargo*	1	-
15.	BoNY Mellon	1	-
16.	Wachovia	1	-
17.	State Street	1	-
18.	American Express	1	-
19.	Washington Mutual	1	-
20.	Raymond James	1	-
21.	Jefferies	1	-
22.	Charles Schwab	1	-
23.	Greenhill	1	-
24.	TD Ameritrade	1	-

Notes:

[1] Peer firms were determined after reviewing 327 analyst and industry reports, as well as Bank of America (BAC) and Merrill Lynch (MER) SEC filings for the time period 1/1/2008 - 10/19/2009. The top 10 firms were ranked based on the number of unique analysts that mentioned each bank as "peers" in their reports.

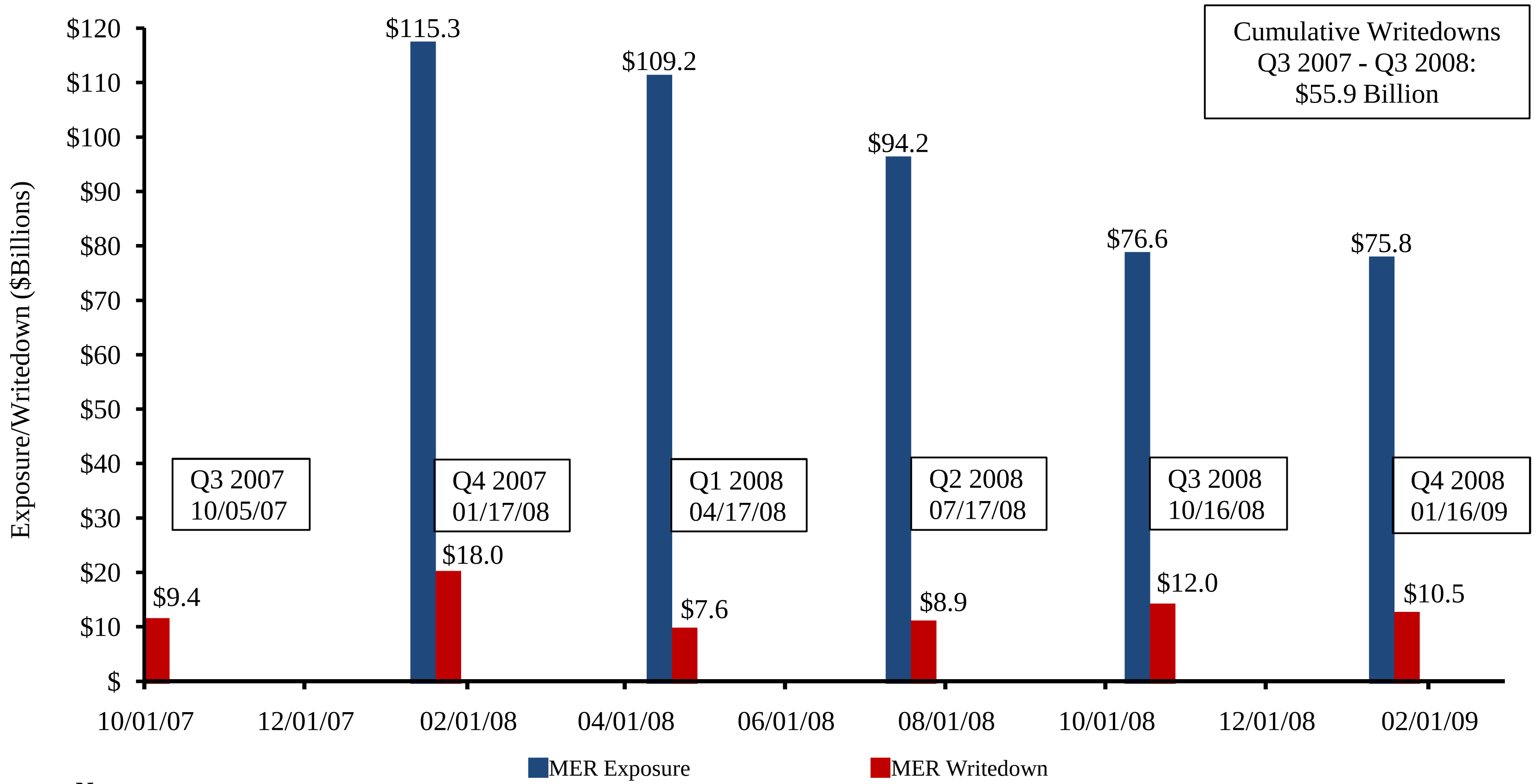
[2] Within the peer listing of Bank of America, the Peer #11 bank Wachovia was mentioned 8 times, which is the same frequency that the Peer #8 firm (BB&T), Peer #9 firm (Goldman Sachs), and Peer #10 Firm (Regions Financials) was mentioned. Therefore, Wachovia was included in the peer index.

[3] After eliminating Lehman Brothers and duplicate banks from Bank of America's top 10 peers and Merrill Lynch's top 10 peers, there are a total of 17 firms in the Peer Index.

[4] * Indicates firms cited as comparable 'broker dealers' and 'large capitalization money centers and regional banks' for Merrill Lynch and Bank of America respectively in the DEFM 14A Filings by both firms dated 11/3/2008.

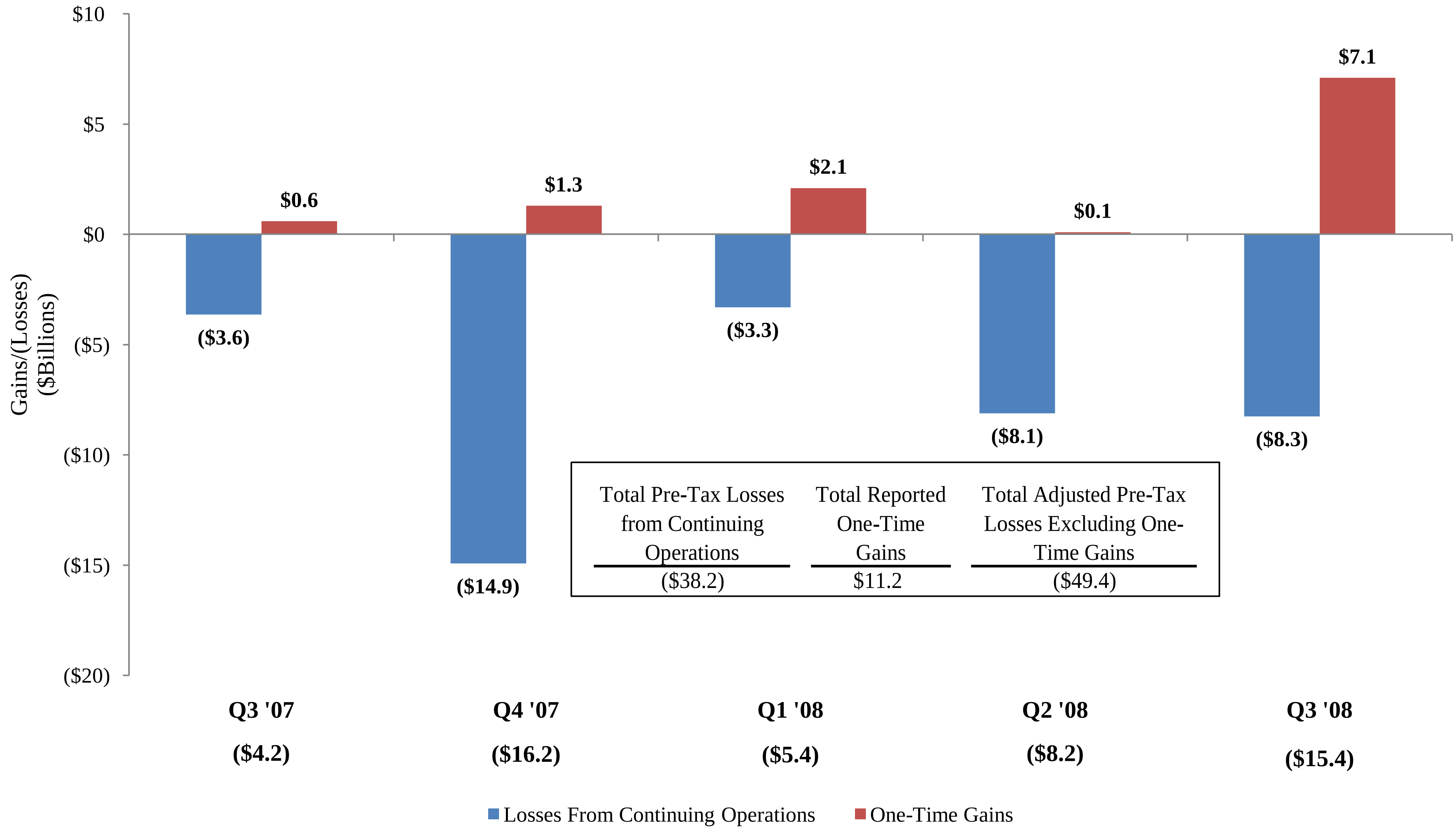
Sources: Analyst and Industry Reports, SEC filings and Bloomberg L.P.

Exhibit 1A. Merrill Lynch (MER) Quarterly Exposures and Writedowns
3rd Quarter 2007 - 4th Quarter 2008



Notes:
[1] Total exposures for Q3 2007 were not released by MER.
[2] Quarterly exposures for MER are calculated by summing exposures on Super Senior ABS CDOs, Legacy Leveraged Loans, Commercial Real Estate, Prime Mortgages, Alt-A Mortgages, Subprime Mortgages, Non-U.S. Mortgages, Monoline Hedges on U.S. Super Senior ABS CDOs, and MER's U.S. Banks Investment Securities Portfolio.
[3] Exposures for Legacy Leveraged Loans for Q4 2008 were estimated by marking down exposures from Q3 2008 with their Q4 2008 mark downs.
[4] Exposures and writedowns for Q4 2008 include Monoline Hedges on Non-Super Senior ABS CDOs ($7.8b). This exposure was not included in previous quarters.
Sources: Bloomberg, L.P., MER 8K 01/17/08, MER 8K 04/17/08, MER 10Q 05/6/08, MER 8K 07/17/08, MER 8K 10/16/08, MER 8K 01/20/09 and Citigroup Global Markets Analyst Report 01/16/2009.

Exhibit 1B. Merrill Lynch (MER) Adjusted Pre-Tax Losses
3rd Quarter 2007 - 3rd Quarter 2008



Note: Adjusted Pre-tax losses are calculated by excluding one-time gains from pre-tax losses from continuing operations.
Sources: MER 10-Q 11/07/07, MER 8-K 1/17/08, MER 10-Q 5/06/08, MER 10-Q 8/05/08, and MER 10-Q 11/04/08.

Exhibit 1C. Commentaries By Bank of America and Merrill Lynch On Market Conditions, Q3 2008

Merrill Lynch Q3 2008 10-Q

"The challenging conditions that existed in the global financial markets during the first half of the year continued during the third quarter of 2008. The adverse market environment intensified towards the end of the quarter, particularly in September, and was characterized by increased illiquidity in the credit markets, wider credit spreads, lower business and consumer confidence, and concerns about corporate earnings and the solvency of many financial institutions" (page 82).

"In the United States, economic activity continued to weaken, driven in part by the difficult conditions in the credit and residential housing markets. Consumer and business confidence also declined and the rate of unemployment continued to rise, which adversely affected the level of domestic spending. Conditions in the financial services industry were particularly difficult" (page 82).

"Turbulent market conditions in the short and medium-term will continue to have an adverse impact on our core businesses" (page 83).

"The near-term risk of spread-widening and the threat of additional ratings agency downgrades of structured securities, as well as the closure and consolidation of certain financial services institutions, continue[] to impact the industry" (page 83).

"During the third quarter of 2008, and particularly in September, the credit and equity markets continued to experience significant deterioration, as spreads across the financial services sector widened dramatically and equity valuations fell, significantly increasing the cost and decreasing the availability of both funding and capital" (page 109).

Bank of America Q3 2008 10-Q

"[M]arket turmoil and tightening of credit have led to an increased level of commercial and consumer delinquencies, lack of consumer confidence, increased market volatility and widespread reduction of business activity generally.… We do not expect that the difficult conditions in the financial markets are likely to improve in the near future" (page 175).

"In recent weeks, the volatility and disruption has reached unprecedented levels…. If current levels of market disruption and volatility continue to worsen, there can be no assurance that we will not experience an adverse effect, which may be material, on our ability to access capital and on our business, financial condition, and results of operations" (page 176).

Merrill's "future results may continue to be materially impacted by the valuation adjustments applied to" positions in securities, derivatives, loans and loan commitments. "Certain of [the risks described in the 10-Q] may have a differing impact, which in certain cases may be, or may have been, more adverse with respect to Merrill Lynch than with respect to [BofA]" (page 177).

Exhibit 1D. Commentaries On Market Conditions
September 2008 - December 2008

Bank of America Acquires Merrill Lynch Conference Call, September 15, 2008 and Bank of America Press Conference, September 15, 2008

On a September 15 investor call, Ken Lewis stated that "the financial system is operating under almost unprecedented stress" and "the remainder of this year and all of next year will be a relatively tough time for the financial services industry" and accordingly "revenue opportunities will be tough, and high levels of charge-offs will continue...." Thain added in the same September 15 press conference, "[t]his is probably the most difficult environment in the financial markets that I have experienced in my 30 years in the business" and "[i]t is a very, very difficult time and it's not going to get better quickly."

Bank of America Corporation Q3 2008 Earnings Conference Call, October 6, 2008

On October 6, Bank of America announced disappointing third quarter earnings of $1.18 billion and cut its dividend in half. During an investor conference call, Lewis stated that the Bank's economic outlook now called for a "weaker economy going into 2009," as the recession was going to be "deeper than we originally thought," Lewis added that "it is difficult to focus on what is going right at this time" and that "charge-offs are going to remain high for a more extended period of time than we would have thought just since last quarter."

Merrill Lynch & Co. Banking and Financial Services Conference, November 11, 2008

At a November 11 financial services conference, Thain stated that the company was "not going to get better quickly" and that the "U.S. economy is contracting very rapidly, asset prices are falling, and that is creating a great degree of uncertainty, both in the equity markets and in the debt markets, about the near-term outlook, at least over the next few quarters." Thain adds that while he was optimistic, Merrill was "going to be in a difficult credit environment in the near term" and "in a very difficult economic environment for a significant period of time."

Financial Times, "Equities in Retreat as Risk Aversion Returns," November 13, 2008

"[C]redit spreads widened sharply as gloomy macroeconomic and corporate news fueled a fresh bout of risk aversion."

Wall Street Journal, "A Market Rebound? Investors Say Wait Till Next Year," November 24, 2008

"[F]orecasts for the economy are only worsening … banks will likely take bigger losses on mortgages, auto loans, and credit-card debt."

Financial Times, "Bernanke Speech Intensifies Flight to Bonds," December 1, 2008

"Investment-grade credit indices in both the US and Europe … widened sharply as the global economic outlook deteriorated."

Wall Street Journal, "Goldman Faces Loss of $2 Billion for Quarter," December 2, 2008

There existed "growing pressures on financial firms amid a steep and unexpected fall in prices of all kinds of assets."

Bank of America Special Shareholder Meeting, December 5, 2008

Ken Lewis warned the audience: "I mean it's extraordinarily bad times," and "I would say we're in the worst economic slump since the Great Depression...."

Exhibit 2. Merrill Lynch Bonus Disclosure Dates

Alleged Corrective Disclosure on January 22, 2009:[1]

A Financial Times article on January 21, 2009 at 11:52 p.m., stated, "Despite the magnitude of the losses, Merrill had set aside $15bn for 2008 compensation, a sum that was only 6 per cent(sic) lower than the total in 2007, when the investment bank's losses were smaller. The bulk of $15bn in compensation was paid out as salary and benefits throughout the course of the year... [and] about $3bn to $4bn was paid out in bonuses in December."

Bonus Disclosure Dates		Description/Source	Excerpt
1.	10/16/2008	Merrill Lynch 8K	"Compensation and benefits expenses were $11.2 billion for the first nine months of 2008.…"[2]
2.	10/27/2008	New York Times	"Five straight quarters of losses and a 70 percent slide in its stock this year have not stopped Merrill Lynch from allocating about $6.7 billion to pay bonuses."[3]
		NBC News: Nightly News	"…and at Merrill Lynch, Bloomberg estimates $6.7 billion set aside for bonuses.…"[4]
3.	10/28/2008	NBC News	"…and at Merrill Lynch, Bloomberg estimates $6.7 billion set aside for bonuses.…"[5]
4.	10/30/2008	Bloomberg	"Three of the firms, Goldman Sachs Group Inc., Morgan Stanley and Merrill Lynch & Co., have already set aside $20 billion to pay bonuses this year."[6]
5.	11/5/2008	Merrill Lynch 10Q for the 3rd Quarter 2008	"Compensation and benefits: 11,170 [million] For the Nine Months Ended Sept. 26, 2008"[7]
6.	11/14/2008	Fox News (after market closed on 11/13/2008)	"Merrill Lynch, which has experienced five straight quarters of losses and a 70 percent slide in its stock this year, has allocated about $6.7 billion [for year-end bonuses]."[8]

Exhibit 2. Merrill Lynch Bonus Disclosure Dates (continued)

Bonus Disclosure Dates		Description/Source	Excerpt
7.	12/3/2008	Bloomberg	"Merrill Lynch & Co. plans to cut year-end bonuses in half after more than $20 billion of losses that forced the U.S. securities firm to sell itself to Bank of America Corp.… Merrill's costs for compensation and benefits this year through September totaled $11.2 billion, down 3 percent from a year earlier."[9]
8.	12/4/2008	The Telegraph	"Merrill is due to inform staff of bonuses on December 22, with payment due at the end of the month."[10]
9.	1/26/2009	StreetInsider	"The size of the pool, its composition (cash and stock mix), and the timing of the payments for both the cash and stock were all determined together with Bank of America....The total bonus pool was also substantially less than the amount allowed under our merger agreement."[11]
10.	1/30/2009	Wall Street Journal	"Some investment-banking employees at Bank of America could have 2008 bonuses delayed until an unspecified date.…Merrill and Bank of America executives agreed.…to cap Merrill's bonus pool at 2007 levels, or about $6 billion, according to people familiar with the matter."[12]

Notes:

[1] Note that the Complaint lists January 22, 2009 as the date that an alleged corrective disclosure was made regarding Merrill Lynch's payout of executive bonuses. See ¶278 of Complaint.

[2] Merrill Lynch 8K dated October 16, 2008, page 8.

[3] Harper, C., and Saitto, S., The New York Times, "Firms Still Setting Aside Billions for Bonuses," October 27, 2008.

[4] NBC News: Nightly News, "Newscast: Wall Street Firms Still Paying Big Year-End Bonuses Even After Financial Bailouts," October 27, 2008.

[5] Costello, T., National Broadcasting Co. Inc.: News Transcripts, "Wall Street Firms Setting Aside Bonus Money for Employees," October 28, 2008.

[6] Harper, C., Bloomberg, "Wall Street Won't Surrender on Bonuses, Veterans Say," October 30, 2008.

[7] Merrill Lynch 10Q dated November 5, 2008, page 5.

[8] Hume, B., Fox News, "Fox News: Special Report with Brit Hume," November 13, 2008 [after markets closed].

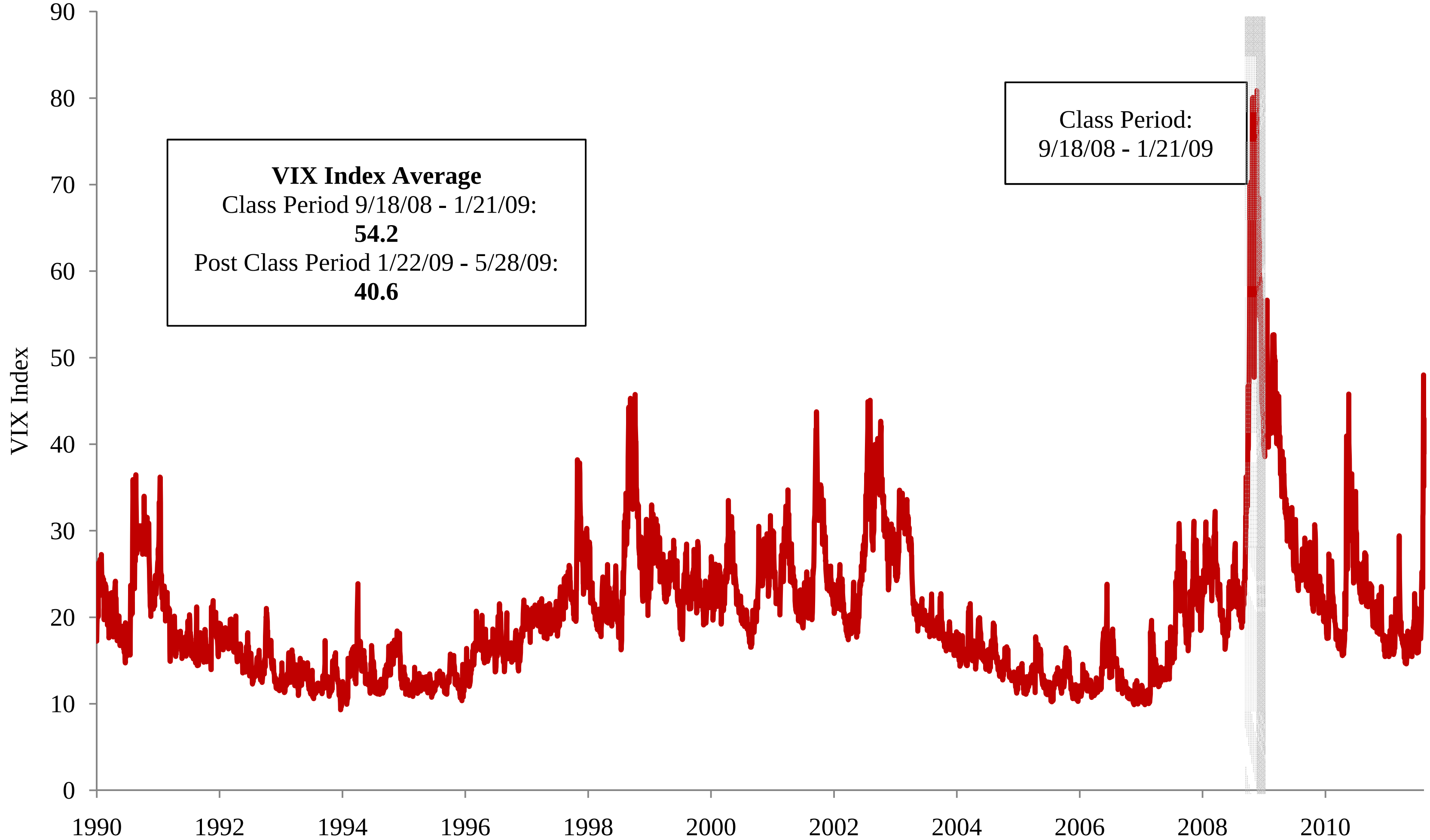
[9] Keoun, B., and Simmons, J., Bloomberg, "Merrill Said to Cut Bonuses by 50% as Revenue Slumps (Update2)," December 3, 2008.

[10] Quinn, J., and Sibum, J., The Telegraph, "Investment Banks Set to Cut 30,000 Jobs," December 4, 2008.

[11] StreetInsider.com, "Copy of John Thain's Memo, Complete With Office-Gate Apology," January 26, 2009.

[12] Fitzpatrick, D., and Craig, S., The Wall Street Journal Online, "Moynihan Tries to Rally the Troops at BofA," January 30, 2009.

Exhibit 3. Chicago Board Options Exchange Market Volatility Index (VIX) 1990 - 2011



Source: Bloomberg, L.P.

Exhibit 4A. Financial Index Constituent Analysis

Index	Total Companies[3]	Number of Companies [Percent of Total]: Real Estate	Financial Services	Banks	Insurance	Other
S&P 500 Financials Index[1]	80	14 [18%]	27 [34%]	15 [19%]	22 [28%]	2 [3%]
Dow Jones Financials Index[2]	259	76 [29%]	50 [19%]	70 [27%]	63 [24%]	0 [0%]

Notes:

[1] The S&P 500 Financials Index is a capitalization-weighted index focused on GICS-specified financial companies stemming from the S&P 500. Companies are sorted using GICS Industry Group Name.

[2] The DowJones US Financials Index is an industry index that measures the performance of the stocks in the DowJones US Index classified into Financial Companies using ICB classification standards. Companies are sorted using ICB Sector Name.

[3] Constituents as of 7/16/10.

Source: Bloomberg, L.P.

Exhibit 4B. Examples of Companies Included in the S&P 500 Financial Index

GICS Industry Subsector	Example Company	Description
Specialized REITs	Health Care REIT, Inc.	Health Care REIT, Inc. is a real estate investment trust. The Trust invests in senior housing and health care real estate. Health Care also provide an extensive array of property management and development services. The trust owns interests in nursing homes, retirement centers, assisted living facilities, and specialty care hospitals.
Property & Casualty Insurance	Berkshire Hathaway, Inc.	Berkshire Hathaway, Inc. is a holding company owning subsidiaries in a variety of business sectors. The company's principal operations are insurance business conducted nationwide on a primary basis and worldwide on a reinsurance basis. Berkshire's other operations include a railway company, a specialty chemical company, and an international association of diversified businesses.
Diversified REITs	Vornado Realty Trust	Vornado Realty Trust is a fully-integrated real estate investment trust. The trust owns, manages and leases office properties in New York City, Washington, DC, and California. The company also owns retail properties Washington, DC and Puerto Rico.
Residential REITs	AvalonBay Communities, Inc.	AvalonBay Communities, Inc. is a real estate investment trust. The company develops, redevelops, acquires, owns and operates multifamily communities in the United States.
Diversified Banks	Comerica, Inc.	Comerica Incorporated is the holding company for business, individual, and investment banks with operations in the United States, Canada, and Mexico. The company's subsidiaries provide services such as corporate banking, international finance, treasury management, community banking, private banking, small business and individual lending, investment services, and institutional trust.
Consumer Finance	Discover Financial Services	Discover Financial Services is a credit card issuer and electronic payment services company. The company issues credit cards and offers student and personal loans, as well as savings products such as certificates of deposit and money market accounts and operates an automated teller machine (ATM)/debit network, which includes ATMs, as well as POS terminals nationwide.
Asset Management & Custody Ban	Janus Capital Group, Inc.	Janus Capital Group, Inc. is a global asset management firm offering individual investors and institutional clients asset management services. The company provides investment management, administration, distribution and related services to individual and institutional investors through mutual funds, separate accounts and subadvised relationships.
Thrifts & Mortgage Finance	People's United Financial, Inc.	People's United Financial, Inc. is a savings and loan holding company. The company provides commercial banking, retail and business banking, and wealth management services to individual, corporate and municipal customers.

Exhibit 4B. Examples of Companies Included in the S&P 500 Financial Index (continued)

GICS Industry Subsector	**Example Company**	**Description**
Multi-Sector Holdings	Leucadia National Corp.	Leucadia National Corporation is a diversified holding company. The company is involved in a variety of businesses, including manufacturing, telecommunications, property management and services, gaming entertainment, real estate activities, medical product development and winery operations.
Real Estate Services	CB Richard Ellis Group, Inc.	CB Richard Ellis Group, Inc. is a global commercial real estate services firm. The company offers a range of services to occupiers, owners, lenders, and investors in office, retail, industrial, multi-family, and other commercial real estate assets. CB Richard Ellis offer services such as advice and execution assistance for property leasing and sales, forecasting, and valuations.
Multi-line Insurance	Hartford Financial Services Group, Inc.	The Hartford Financial Services Group, Inc. provides a range of insurance products. The company's products include property and casualty insurance, annuities, life insurance, investment services, and group insurance. Hartford Financial operates around the world.
Retail REITs	Simon Property Group, Inc.	Simon Property Group, Inc. is a self-administered and self-managed, real estate investment trust. The company owns, develops, and manages retail real estate properties including regional malls, outlet centers, community/lifestyle centers, and international properties.
Specialized Finance	Moody's Corp.	Moody's Corporation is a credit rating, research, and risk analysis firm. The company provides credit ratings and related research, data and analytical tools, quantitative credit risk measures, risk scoring software, and credit portfolio management solutions and securities pricing software and valuation models.
Office REITs	Boston Properties, Inc.	Boston Properties, Inc. is a real estate investment trust. The trust owns, manages, and develops office properties in the United States, with a significant presence in Boston, Washington, D.C., midtown Manhattan and San Francisco.
Life & Health Insurance	Unum Group	Unum Group provides group disability and special risk insurance. The company provides disability insurance, group life insurance, and payroll-deducted voluntary benefits offered to employees at their worksites.
Insurance Brokers	Marsh & McLennan Companies, Inc.	Marsh & McLennan Companies, Inc. is a global professional services firm providing advice and solutions in the areas of risk, strategy and human capital. Marsh & McLennan offers analysis, advice, and transactional capabilities to clients worldwide.
Regional Banks	Zions Bancorporation	Zions Bancorporation is a bank holding company that operates full-service banking offices in the western United States. The company also offers an array of investment, mortgage, insurance, and electronic commerce services. In addition, Zions provides financing solutions for small businesses across the United States.

Source: Bloomberg, L.P.

Exhibit 5. Results of Regression Analysis of Bank of America's Returns

	Abnormal Returns		Abnormal Dollar Impact	
Independent Variables	Coefficient	t-stat	Coefficient	t-stat
Intercept	0.00	0.06		
Log Return for Peer 17 Value-Weighted Index	1.31	24.56 **		
Bank of America Announcements:				
Indicator for 9/18/08 (BAC 8-K Merger Agreement)	-0.06	1.32	-2.03	1.30
Indicator for 10/07/08 (Seasoned Equity Offering and BAC 8-K Q3 2008 Earnings Announcement)	-0.15	3.19 **	-3.94	2.98 **
Indicator for 04/20/09 (BAC 8-K Q1 2009 Earnings Announcement)	-0.12	2.53 *	-1.04	2.40 *
Alleged Corrective Disclosure Dates:				
Indicator for 1/12/09	-0.06	1.29	-0.74	1.28
Indicator for 1/13/09	-0.08	1.71	-0.91	1.66
Indicator for 1/15/09	-0.11	2.38 *	-1.00	2.27 *
Indicator for 1/16/09	-0.08	1.72	-0.62	1.68
Indicator for 1/22/09	-0.12	2.49 *	-0.72	2.37 *

Number of Observations: 174
Adjusted R-squared: 81%

Notes:

* significant at 5%; ** significant at 1%

[1] Indicator Variables for Bank of America Announcements and Alleged Corrective Disclosure Dates are equal to 1 for the date indicated and 0 otherwise.

[2] The Regression Period is from 9/18/08-5/28/09. In this analysis, an equal number of days following the Class Period is used as the Control Period (1/23/09-5/28/09) because the stock prices following the Class Period reflect the merged Bank of America-Merrill Lynch entity.

[3] The Peer 17 Value Weighted Index is calculated using the daily market value of equity for the following banks: Barclays, BB&T, Citigroup, Credit Suisse, First Third, Goldman Sachs, JPMorgan, Key Corp, Lazard, Morgan Stanley, Nomura, Regions Financial, Sun Trust, UBS, US Bancorp, Wachovia, and Wells Fargo.

[4] Bank of America's acquisition of Merrill Lynch was announced on 9/15/08, but the acquisition was closed on 1/01/09.

[5] Abnormal Dollar Impacts are calculated according to the method outlined in Saha and Ferrell (2011) "Event Study Analysis: Correctly Measuring the Dollar Impact of an Event."

Source: Bloomberg, L.P.

Exhibit 6. Analyst Commentaries and Articles on Bank of America (BAC) January 16, 2009 and After

Panel A: BAC 4th Quarter 2008 Losses

<u>Morgan Stanley, "Bank of America: Quick Comment: USG Risk Sharing a Partial Offset to Declining EPS Outlook," January 16, 2009</u>

"BAC: reported -48c, <u>missing our estimate</u> of -6c. BAC missed on capital markets/ib as well as higher than expected reserve build (12c)" (page 1, emphasis added).

<u>Buckingham Research, "BAC: Difficult Road, but Looking Oversold," January 16, 2009</u>

"BAC reported its first loss of this cycle in 4Q08, losing $1.8bn or $0.48 per share vs. consensus of a modest profit of $0.08 [...] credit quality was <u>worse than expected</u>, with net charge-offs $500m (or 10%) higher than forecast" (page 2, emphasis added).

<u>Credit Suisse, "BAC: More TARP, More Challenges," January 16, 2009</u>

"BAC reported 4Q08 EPS loss of $0.48 vs. 4Q07 EPS of $0.05. The bottom line loss was due to <u>worse than expected</u> market-related disruption losses/writedowns, as well as outsized credit costs and reserve build" (page 1, emphasis added).

<u>Fox-Pitt Kelton, "BAC: 4Q08 Quick Take: TARP 2 Annc'd (like Citi) Along w/ Worse 4Q," January 16, 2009</u>

"<u>Greater than expected losses</u> driven by higher market w/d's and credit losses" (page 1, emphasis added).

<u>Barclays Capital, "Earnings Review/Sales Analysis," January 16, 2009</u>

"Bottom line – Results at BAC were <u>below expectations</u> due to provisioning, marks and trading." (page 1, emphasis added).

<u>Ladenburg Thalmann, "BAC: Company of Opportunity," January 18, 2009</u>

"Bank of America reported a fourth quarter loss of $0.48 per share. This compared to my estimate of a loss of $0.45 per share and profits of $0.15 per share in the third quarter" (page 1).

<u>Fox-Pitt Kelton, "BAC: Lowering Ests Post 4Q Results/Actions; Reaction Overdone," January 20, 2009</u>

"<u>Asset quality and capital markets worse-than-expected</u> in 4Q with BAC-standalone credit costs of $8.5b (vs our est of $6.6b) driven by higher losses in housing/consumer segments as well as commercial" (page 1, emphasis added).

Exhibit 6. Analyst Commentaries and Articles on Bank of America (BAC) January 16, 2009 and After (continued)

Panel A: BAC 4th Quarter 2008 Losses (continued)

Oppenheimer, "BAC 4Q08 Earnings," January 20, 2009

"Friday, Bank of America reported 4Q08 an EPS loss of $0.48 vs. our estimate of $0.07 and consensus of $0.08" (page 1).

RBC Capital Markets, "BAC: 4Q08 EPS Fall Short; Government Provides Loss Backstop and Capital Infusion," January 20, 2009

"Bank of America released its full 4Q08 results early, reporting an EPS loss of (-$0.48) including $0.04/share of merger charges. The core loss of (-$0.44) widely missed both our $0.10 estimate and the consensus of $0.08 largely due to much higher provisions and sizable capital markets-related write-downs/losses" (page 1, emphasis added).

J.P. Morgan, "4Q: Poor Merrill Acquisition, Government Bailout, Credit, Writedowns Much Worse," January 20, 2009

"BAC had higher than expect writedowns on its own exposures, totaling $5.2 bil. Most of these exposures are likely to be covered by the asset guarantee with the government" (page 2, emphasis added).

J.P. Morgan, "BAC: 4Q08 Earnings Review," January 21, 2009

"Bank of America (BAC) reported a 4Q08 net loss of $1.8 billion, before preferred dividends, that was firmly worse than expectations" (page 1, emphasis added).

Panel B: BAC TARP Announcement

Credit Suisse, "BAC: More TARP, More Challenges," January 16, 2009

"BAC announced that it had reached an agreement with the US Treasury surrounding the guarantee of assets, additional capital ($20bn preferred) and liquidity access. Concurrent with this announcement, BAC reduced its quarterly dividend to $0.01/shr (from $0.32/shr)" (page 1).

Fox-Pitt Kelton, "Bank of America: Detailing the Annc'd TARP 2; Deal Similar to Citi," January 16, 2009

"Additional support by Treasury, Fed, FDIC annc'd today […] We estimate $0.30/share annual drag on earnings from the TARP investment and loss guarantee" (page 1).

Exhibit 6. Analyst Commentaries and Articles on Bank of America (BAC) January 16, 2009 and After (continued)

Panel B: BAC TARP Announcement (continued)

Morgan Stanley, "Bank of America: Quick Comment: USG Risk Sharing a Partial Offset to Declining EPS Outlook," January 16, 2009

"The government agreed to backstop approx $118B of assets, with BAC taking the next $10 billion of loss and the government backstopping 90% of any additional loss. BAC cut its dividend to 1c/quarter" (page 1).

Fitch, "Fitch Downgrades Bank of America N.A. IDR to 'A+'; Affirms BofA Corp. at 'A+'," January 16, 2009

"Fitch's rating actions reflect our view that the combined BAC/MER franchise is likely to experience ongoing operating and asset quality pressures in the current severe recessionary environment. The actions, which result in a convergence of BAC's IDR at its Support Floor, also reflect the fact that government support has been forthcoming and additional support will likely be provided in the future if necessary, due to BAC's prominence in the global and domestic banking system" (page 1).

Ladenburg Thalmann, "BAC: Company of Opportunity," January 18, 2009

"Bank of America announced that it had cut its dividend to $0.04 per share for the year. This was done because the bank had decided to accept an agreement with the government whereby the bank added to its capital and received a backstop on loan losses" (page 8).

J.P. Morgan, "4Q: Poor Merrill Acquisition, Government Bailout, Credit, Writedowns Much Worse," January 20, 2009

"BAC will receive another $24 bil of capital from the government, of which $20 bil will come from TARP and the other $4 from the Treasury and FDIC" (page 2).

Oppenheimer, "BAC 4Q08 Earnings," January 20, 2009

"BAC also announced that the U.S. government had agreed to assist it in its MER acquisition by making a $20B investment in BAC preferred stock under TARP" (page 1).

RBC Capital Markets, "BAC: 4Q08 EPS Fall Short; Government Provides Loss Backstop and Capital Infusion," January 20, 2009

"BofA announced a loss sharing agreement with the government as well as an additional $20 billion TARP capital injection. In exchange, BofA cut its quarterly dividend from $0.32 to $0.01" (page1).

Exhibit 6. Analyst Commentaries and Articles on Bank of America (BAC) January 16, 2009 and After (continued)

Panel B: BAC TARP Announcement (continued)

UBS, "Gov't Actions Don't Address Low Common Equity; Dividend Cut & 4Q Loss," January 16, 2009

"BAC announced it is receiving a total of $24 b of preferred equity (carrying an 8% dividend) from the US Gov't" (page 1).

Barclays Capital, "4Q08 Follow-up: Weak Results = Support," January 20, 2009

"In January 2009, an additional $10 billion of preferred stock (part of the original $25B assigned to BAC and MER) was issued to Treasury as part of the TARP" (page 3).

J.P. Morgan, "4Q: Poor Merrill Acquisition, Government Bailout, Credit, Writedowns Much Worse," January 20, 2009

"BAC will get protection on $118 bil of assets (75% MER, 25% BAC) from the government and will bear first $10 bil of loss with 90% of the loss on the rest borne by the government. BAC received another $20 bil of preferred capital from TARP and will issue an additional $4 bil preferred to the gov't (which will have 7% stake in BAC) for the insurance, which will be expensed through the income statement" (page 1).

Citigroup, "4Q08 Results Reveal Significant Deterioration at MER," January 22, 2009

"In -line with media reports prior to 4Q results, BAC announced implementation of a new government guarantee on a $118 bil pool of risk assets comprised of ~ 75% MER assets and ~25% BAC assets" (page 7).

Panel C: BAC Nationalization

"Nationalization rumors slam Citigroup, Bank of America," *Los Angeles Times*, January 15, 2009

"The hottest rumor on Wall Street today was that the government was planning to effectively nationalize Citigroup Inc. and Bank of America Corp., perhaps as early as this weekend. That talk has devastated many financial stocks, and hammered the broader market for a second straight session...."

"Bank of America gets $138bn lifeline," *Financial Times*, January 15, 2009

"Bank of America will on Friday receive $20bn in fresh capital from the US government and a guarantee on most of a further $118bn of potential losses on toxic assets...."

Exhibit 6. Analyst Commentaries and Articles on Bank of America (BAC) January 16, 2009 and After (continued)

Panel C: BAC Nationalization (continued)

"Nationalization Hinted in Rescues," *The New York Times*, January 16, 2009

"The approximately $120 billion aid package on Thursday for Bank of America -- including injections of capital and absorbed losses.… represented displays of financial gymnastics…."

"What if Uncle Sam Takes Over Your Bank," *The Wall Street Journal*, January 22, 2009

"The latest wave of banking problems has investors worried that the government will nationalize deeply wounded institutions, such as Bank of America Corp. and Citigroup Inc."

"Citigroup, Bank of America May Look 'Nationalized' (Update3)," *Bloomberg*, January 23, 2009

"The U.S. government's decision to pledge billions of additional dollars with strings attached to Citigroup Inc. and Bank of America Corp. may be nationalization by another name, according to former bankers and regulators."

Ladenburg Thalmann, "Bank of America (BAC) Fighting for Credibility," February 5, 2009

"These numbers are clear, investors believe that this bank is about to fail and be nationalized by the United States government. If they believed that it would continue as an operating entity it is unlikely that the bank would be selling at such a low value" (page 1).

Note: A total of 75 Analyst Reports from 1/16/2009 - 5/1/2009 were surveyed.

Sources: Equity Research Analyst Reports from Morgan Stanley, Buckingham Research Group, Credit Suisse, Fox-Pitt Kelton, Ladenburg Thalmann, Oppenheimer, RBC Capital Markets, J.P. Morgan, Citigroup, Fitch, UBS, and Barclays Capital; news articles from New York Times, Los Angeles Times, The Wall Street Journal, Financial Times and Bloomberg L.P.

Exhibit 7. Confounding News on January 22, 2009
John Thain's Resignation from Bank of America/Merrill Lynch

Date	Time	Source	Description
01/19/09	12:40 AM	Charlie Gasparino[1]	"I don't want to convey to you that Ken was delighted in mid-December when he found out about the losses, in fact he was pissed at Thain," according to one person at BofA who is close to Lewis. My guess is that Lewis can't get rid of Thain because if he does, he opens himself up to too much criticism, but at some point he'll find a way and Thain will be gone.
01/21/09	3:25 PM	Charlie Gasparino CNBC Video[2]	"There is a revolt inside Merrill Lynch involving John Thain. It involves the bonuses that were paid to Merrill Lynch executives. Sources tell CNBC that these executives may sue John Thain [due to the high strike price he set for the bonuses]."
01/22/09	10:30 AM	Charlie Gasparino CNBC Video[3]	"Ken Lewis, the CEO of Bank of America, will hold an emergency meeting with John Thain today. This will center on Thain's future with the firm - whether he stays or goes. Sources are telling me that his future is uncertain. The sources inside Merrill say that John Thain's gone."
01/22/09	11:46 AM	Charlie Gasparino CNBC Video[4]	"John Thain came to a mutual agreement with Ken Lewis to resign from Merrill Lynch effective immediately."

Notes:

[1] Charlie Gasparino, "Was John Thain Talking Bull About Merrill?" The Daily Beast, January 19, 2009.

[2] Charlie Gasparino, "John Thain's Future at BofA," CNBC Video, January 21, 2009.

[3] Charlie Gasparino, "Bank of America Emergency Meeting," CNBC Video, January 22, 2009.

[4] Charlie Gasparino, "John Thain to Leave Bank of America," CNBC Video, January 22, 2009.

Exhibit 8. Results of Regression Analysis of Bank of America's Returns On Bonus Disclosure Dates

	Abnormal Returns		Abnormal Dollar Impact	
Independent Variables	Coefficient	t-stat	Coefficient	t-stat
Bonus Disclosure Dates				
1. Indicator for 9/18/08 (BAC 8-K)	-0.07	1.32	-2.10	1.30
2. Indicator for 10/02/08 (BAC S-4)[1]	-0.02	0.45	-0.85	0.47
3. Indicator for 10/16/08 (ML 8-K)	-0.01	0.26	-0.34	0.29
4. Indicator for 10/22/08 (BAC S-4A)	0.03	0.58	0.60	0.56
5. Indicator for 10/27/08 (NYT/NBC)	0.03	0.64	0.61	0.63
6. Indicator for 10/28/08 (NBC News)	-0.01	0.27	-0.33	0.29
7. Indicator for 10/30/08 (BAC S-4A[1], Bloomberg)	-0.02	0.35	-0.42	0.37
8. Indicator for 11/04/08 (BAC DEF 14A)[1]	-0.03	0.51	-0.65	0.53
9. Indicator for 11/05/08 (ML 10Q)	0.00	0.03	0.00	0.00
10. Indicator for 11/14/08 (Fox News)[1]	0.03	0.59	0.45	0.58
11. Indicator for 12/03/08 (Bloomberg)	-0.03	0.53	-0.41	0.55
12. Indicator for 12/04/08 (The Telegraph)	-0.03	0.67	-0.49	0.68
13. Indicator for 1/26/09 (StreetInsider)	-0.04	0.78	-0.24	0.79
14. Indicator for 1/30/09 (Wall Street Journal)	-0.01	0.28	-0.10	0.30
			Number of Observations:	174
			Adjusted R-squared:	79%

Notes:

* significant at 5%; ** significant at 1%

[1] Indicator Variables for Bank of America Announcements, Alleged Corrective Disclosure Dates, and Bonus Disclosure Dates are equal to 1 for the date indicated and 0 otherwise. Note that the following filings/news articles (BAC S-4 on 10/01/08, BAC S-4 on 10/29/08, BAC DEF 14A on 11/03/08, and Fox News on 11/13/08) were either (a) published after the 4:00 p.m. close of financial markets or (b) on a Saturday or Sunday, so indicator variables are included for the next trading day after the filing.

[2] Independent variables included in the regression but not reported in this exhibit are the following: Log Return for Peer 17 Value-Weighted Index, Indicator Variables for Bank of America Announcements (10/07/08 Seasoned Equity Offering, 4/20/09 8-K), and Indicator Variables for Alleged Corrective Disclosure Dates (1/12/09, 1/13/09, 1/16/09, and 1/22/09).

[3] The Regression Period is from 9/18/08-5/28/09. In this analysis, an equal number of days following the Class Period is used as the Control Period (1/23/09-5/28/09) because the stock prices following the Class Period reflect the merged Bank of America-Merrill Lynch entity.

[4] The Peer 17 Value Weighted Index is calculated using the daily market value of equity for the following banks: Barclays, BB&T, Citigroup, Credit Suisse, First Third, Goldman Sachs, JPMorgan, Key Corp, Lazard, Morgan Stanley, Nomura, Regions Financial, Sun Trust, UBS, US Bancorp, Wachovia, and Wells Fargo.

[5] Bank of America's acquisition of Merrill Lynch was announced on 9/15/08, but the acquisition was closed on 1/01/09.

[6] Abnormal Dollar Impacts are calculated according to the method outlined in Saha and Ferrell (2011) "Event Study Analysis: Correctly Measuring the Dollar Impact of an Event."

Source: Bloomberg, L.P.

Exhibit 9. Estimation of Co-Ownership of Bank of America and Merrill Lynch

	9/30/2008	12/31/2008
Merrill Lynch Shares Held By Institutions	1,111,785,196	1,150,569,895
● Merrill Lynch Shares Held By Institutions Converted to Bank of America (BAC) Equivalent Shares (x.8595)[1]	955,579,376	988,914,825
● Merrill Lynch Shares Held By Institutions (BAC Converted) Held By BAC Owners	716,201,139	985,122,939
● BAC Shares Held By Institutions with Equivalent or Greater MER Holdings	32,679,351	225,615,425
● BAC Shares Held By Institutions Capped By The Same Institution's MER Holdings	520,142,063	759,011,358
Total:	**552,821,414**	**984,626,783**
Bank of America Shares Held By Institutions	**2,722,085,517**	**4,051,905,051**
% Bank of America Shares Held By Institutions Offset By Their Merrill Lynch Shares Held	**20.3%**	**24.3%**

Note:

[1] Each share of Merrill Lynch was exchanged for .8595 of a share of Bank of America. See BAC 10K 2/28/09 p. 17 for more details.

Sources: Thomson Financial and Bloomberg, L.P.